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Annual Forest Administration Report of the Province of Bombay 1939-40

Part II

Appendices

FINANCE DEPARTMENT
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Appendices

FORM NO. 51 (PART I).—*Area of Reserved and*

Division.	Civil district or territory (separate figures should be given for each District).	Kind of Forest.	Area on 1st April 1939.	
			Acres.	Equivalent in square miles.
1	2	3	4	5
NORTHERN CIRCLE.				
Panch Mahals	Broach and Panch Mahals	Reserved ...	201,785	315
		Protected ...	.....	.....
North Thana ...	Thana	Reserved ...	226,483	354
	Do.	Protected ...	414	1
East Thana ...	Thana	Reserved ...	222,310	347
	Do.	Protected ...	.....	.....
	Nasik	Reserved ...	53,529	84
	Do.	Protected ...	.....	.....
West Thana ...	Thana	Reserved ...	215,158	336
	Do.	Protected ...	7,793	12
East Nasik ...	Nasik	Reserved ...	435,933	681
	Do.	Protected ...	2,629	4
West Nasik ...	Nasik	Reserved ...	220,175	344
	Do.	Protected ...	56,150	88
	Thana	Reserved ...	3,514	6
	Do.	Protected ...	1,792	3
	Ahmednagar	Reserved ...	124,413	195
	Do.	Protected ...	6,656	10
Surat Sub-Division	Surat	Reserved ...	50,852	79
	Do.	Protected ...	.....	.....
	Nasik	Reserved ...	13,755	21
	Do.	Protected ...	1,267	2
	Total, Northern Circle	Reserved ...	1,767,957	2,762
		Protected ...	76,701	120
CENTRAL CIRCLE.				
East Khándesh	East Khandesh ...	Reserved ...	708,549	1,107
	Do. ...	Protected ...	.....	.....
West Khandesh	West Khandesh ...	Reserved ...	740,029	1,157
	Do. ...	Protected ...	.....	.....

Protected Forests in charge of Forest Department, 1939-40.

Added during the year.	Excluded or transferred to other head.	Area on 31st March 1940.		Tripartite classification.			Remarks.
Acres.	Acres.	Acres.	Equivalent in square miles.	Forest proper.	Pasture reserves.	Fuel and fodder reserves.	
6	7	8	9	10	11	12	13
				Sq. M.	Sq. M.	Sq. M.	
.....	.....	201,785	315	315	.....	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	.....	226,483	354	352	.....	2	
.....	.....	414	1	1	.....	.....	
.....	.....	222,310	347	347	.....	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	23	53,506	84	84	.....	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	.....	215,158	336	336	.....	.....	
.....	.....	7,793	12	12	.....	.....	
35	153	435,865	681	679	.....	2	
.....	.....	2,629	4	4	.....	.....	
27	361	219,841	343	343	.....	.....	
.....	.....	56,150	88	88	.....	.....	
.....	.....	3,514	6	6	.....	.....	
.....	.....	1,792	3	3	.....	.....	
.....	25	124,388(a)	195	195	.....	.....	
.....	.....	6,656(a)	10	10	.....	.....	
.....	.....	50,852	79	79	.....	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	.....	13,755	21	21	.....	.....	
.....	.....	1,267	2	2	.....	.....	
62	562	1,767,457	2,761	2,757	.....	4	
.....	.....	76,701	120	120	.....	.....	
38,164(b)	259,599(b)	487,114	761	761	.....	.....	
.....	.....	.....	.....	.....	.....	.....	
259,699(b)	38,164(b) 525	960,939	1,502	1,372	.....	130	
.....	.....	.....	.....	.....	.....	.....	

(a) Includes 2 square miles submerged in the Bhandardara lake.
(b) Includes areas transferred from one division to another.

FORM No. 51 (PART I)—*Area of Reserved and*

Division.	Civil district or territory (separate figures should be given for each District).	Kind of Forest.	Area on 1st April 1939.	
			Acres.	Equivalent in square miles.
1	2	3	4	5
CENTRAL CIRCLE —*contd.*				
Poona ...	Poona	Reserved ...	235,300	368
	Do.	Protected ...	.....	.....
	Ahmednagar	Reserved ...	290	.....
	Do.	Protected ...	.....	.....
Kolába ...	Kolaba	Reserved ...	279,282	436
	Do.	Protected ...	22,544	35
	Poona	Reserved ...	6,529	10
	Do.	Protected ...	.....	.....
	Ratnagiri	Reserved ...	2,285	4
	Do.	Protected ...	.....	.....
Sátara ...	Satara	Reserved and Leased.	328,912	514
	Do.	Protected ...	667	1
	Total, Central Circle	Reserved and Leased.	2,301,176	3,596
		Protected ...	23,201	36
SOUTHERN CIRCLE.				
Kanara, N. D. ...	Kanara	Reserved ...	566,098	885
Kanara, E. D. ...	Do.	Reserved ...	681,085	1,064
Kanara, W. D.	Kanara	Reserved ...	683,279	1,068
	Do.	Protected ...	2,366	4
Belgaum Division	Do.	Reserved ...	.....	.....
	Belgaum	Reserved ...	447,631	699
	Do.	Protected ...	12	.....
Dharwar-Bijapur Dn.	Dharwar	Reserved ...	161,251	252
	Bijapur	Reserved ...	155,584	243
	Total, Southern Circle.	Reserved ...	2,694,908	4,211
		Protected ...	2,378	4
	Grand Total, Province of Bombay.	Reserved ...	6,764,041	10,569
		Protected ...	102,280	160

Protected Forests in charge of Forest Department, 1939-40—concld.

Added during the year.	Excluded or transferred to other heads	Area on 31st March 1940.		Tripartite classification.			Remarks.
Acres.	Acres.	Acres.	Equivalent in square miles.	Forest proper.	Pasture reserves.	Fuel and fodder reserves.	
6	7	8	9	10	11	12	13
				Sq. M.	Sq. M.	Sq. M.	
146	4	235,442	368	350	18	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	.....	290	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	1	279,281	436	417	15	4	
.....	.....	22,544	35	35	.....	.....	
.....	.....	6,529	10	10	.....	.....	
.....	.....	.....	.....	.....	.....	.....	
4	261	2,028	4	4	.....	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	66	328,846	514	514	.....	.....	
.....	.....	657	1	1	.....	.....	
297,913	298,620	2,300,469	3,596	3,428	33	134	
.....	.....	23,201	36	36	.....	.....	
.....	61 230,951(a)	335,086	524	524	.....	.....	
.....	13 71(c)	680,981	1,064	786	278	.....	
21	37	653,263	1,068	760	308	.....	
.....	.....	2,366	4	.....	4	.....	
230,951(a)	41	230,910	361	361	.....	.....	
6 1(b)	316	447,322	699	649	50	.....	
.....	.....	12	.....	.....	.....	.....	
.....	92	161,159	252	244	.....	8	
.....	301	155,283	243	201	38	8	
230,979	231,883	2,694,004	4,210	3,525	674	11	
.....	.....	2,378	4	.....	4	.....	
528,954	531,065	6,761,930	10,568	9,710	707	149	
.....	.....	102,288	160	156	4	.....	

(a) Includes areas transferred from one division to another.
(b) Rectification of errors as per G. N. No. S. 36/3/1668-erratum, dated 26th May 1939.
(c) Reserved Forest in charge of F. D., converted into protected forest and transferred to the control of Revenue Department.

FORM NO. 51 (PART II).—*Area of Reserved and*

Division	Civil district or territory (separate figures should be given for each District)	Kind of Forest	Area on 1st April 1939	
			Acres	Equivalent in square miles
1	2	3	4	5
NORTHERN CIRCLE.				
Panch Mahals ...	Broach and Panch Mahals.	Reserved ...	2,384	4
	Do. do. ...	Protected ...	.....	.....
North Thana ...	Thana	Reserved ..	.....	.....
	Do.	Protected ..	87,905	137
East Thana ...	Thana	Reserved ...	.....	.....
	Do.	Protected ...	70,019	109
	Nasik	Reserved ...	273	
	Do.	Protected ...	.....	.....
West Thana ...	Thana	Reserved ...	.....	.....
	Do.	Protected ...	76,342	119
East Nasik ...	Nasik	Reserved ...	22,920	36
	Do.	Protected ...	.....	.....
	Nagar	Reserved ...	8,242	13
	Do.	Protected ...	.....	.....
West Nasik ...	Nasik	Reserved ...	8,069	13
	Do.	Protected ...	.....	.....
	Thana	Reserved ...	.....	.....
	Do.	Protected ...	529	1
	Ahmednagar	Reserved ...	64,203	100
	Do.	Protected ...	.....	.....
Surat Sub-Division ...	Surat	Reserved ...	8,103	13
	Do.	Protected ...	.....	.....
Ahmedabad ...	Ahmedabad	Reserved ...	9,262	14
	Do.	Protected ...	.....	.....
	Total, Northern Circle ...	Reserved ...	1,23,476	193
		Protected ...	2,34,795	366

Protected Forests in charge of Revenue Department, 1939-40.

Added during the year	Excluded or transferred to other head	Area on 31st March 1940		Tripartite classification			Remarks
Acres	Acres	Acres	Equivalent in square miles	Forest proper	Pasture reserves	Fuel and fodder reserves	
6	7	8	9	10	11	12	13
				Sq. M.	Sq. M.	Sq. M.	
.....	.....	2,384	4	.....	4	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	
47	1,854	86,093	134	.....	134	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	4,870	65,149 273	101	.....	101	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	2,793	73,549	115	.....	115	.....	
.....	1,127	21,793	34	.....	34	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	.....	8,242	13	.....	13	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	226	7,863	13	.....	11	2	
.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	84	445	1	1	.....	.....	
.....	.....	64,203	100	.....	100	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	.....	8,103	13	.....	.....	13	
.....	.....	.....	.....	.....	.....	.....	
.....	623(a) 5	8,634	13	.....	.....	13	
.....	.....	.....	.....	.....	.....	.....	
.....	1,981	1,21,495	190	.....	162	28	
47	9,601	2,25,241	351	1	350	.....	

(a) Errors corrected.

FORM No. 51 (PART II).—*Area of Reserved and*

Division	Civil district or territory (separate figures should be given for each District)	Kind of Forest	Area on 1st April 1939	
			Acres	Equivalent in square miles
1	2	3	4	5
CENTRAL CIRCLE.				
East Khandesh ...	East Khandesh ...	Reserved ...	10,627	17
West Khandesh ...	West Khandesh ...	Reserved ...	94,756	148
Poona	Poona	Reserved ..	165,062	257
	Ahmednagar	Reserved ...	.....	.....
Kolaba	Kolaba	Reserved ...	8,488	13
	Do.	Protected ...	24,553	38
	Ratnagiri	Reserved ...	9,809	15
Satara	Satara	Reserved ...	118,772	186
Ahmednagar and Sholapur.	Ahmednagar and Sholapur.	Reserved ...	409,022	639
	Total, Central Circle ...	Reserved ...	816,536	1,275
		Protected ...	24,553	38
SOUTHERN CIRCLE.				
Kanara, N. D.	Kanara	Protected ...	6,560	11
Kanara, E. D.	Do.	Protected ...	115,959	181
Kanara, W. D. ...	Kanara	Protected ...	8,569	13
	Do.	Reserved ...	6,565	10
Belgaum	Kanara	Protected ...	.....	.....
	Belgaum	Reserved ...	985	2
Dharwar-Bijapur ...	Dharwar	Reserved ...	77,274	121
	Bijapur	Reserved ...	18,493	29
	Total, Southern Circle ...	Reserved ...	103,317	162
		Protected ...	131,089	205
	Grand Total, Province of Bombay.	Reserved ...	1,043,329	1,630
		Protected ...	390,436	610

Protected Forests in charge of Revenue Department, 1939-40—contd.

Added during the year	Excluded or transferred to other head	Area on 31st March 1940		Tripartite classification			Remarks
Acres	Acres	Acres	Equivalent in square miles	Forest proper	Pasture reserves	Fuel and Fodder reserves	
6	7	8	9	10	11	12	13
				Sq. M.	Sq. M.	Sq. M.	
(a) 13,292	.....	23,919	37	.....	37	.....	
.....	(a) 13,292	81,172	128	.....	128	.....	
.....	292 5,033	160,029	250	.....	250	.....	
.....	.....	.....	.....	.....	.....	.....	
.....	.....	8,438	13	.....	13	.....	
.....	4	24,549	38	.....	38	.....	
.....	.....	9,869	15	.....	15	.....	
.....	111	118,661	186	.....	182	4	
.....	952	408,070	637	.....	637	.....	
13,292	19,650	810,148	1,266	.....	1,262	4	
.....	4	24,549	38	.....	38	.....	
.....	(a) 3,994	2,566	4	.....	4	.....	
(b) 71	6 (c) 2	116,022	181	.....	181	.....	
.....	.....	8,569	13	.....	13	.....	
.....	1	6,564	10	.....	10	.....	
(a) 3,994	.....	3,994	7	.....	7	.....	
.....	36	949	2	.....	2	.....	
.....	287	76,987	120	.....	120	.....	
.....	66	18,427	29	.....	29	.....	
.....	390	102,927	161	.....	161	.....	
4,065	4,002	131,151	205	.....	205	.....	
13,292	22,051	1,031,570	1,617	.....	1,585	32	
4,112	13,607	390,941	594	1	593	.....	

(a) Includes area transferred from one division to another.
(b) Reserved Forest in charge of the Forest Department converted into Protected Forest and transferred to the control of Revenue Department.
(c) Errors collected.

sm Bk E 17—2

FORM No. 53.—*Record of Demarcation*

Circle	Length of boundaries artificially demarcated during the year	Length of previously existing boundaries repaired	Length of previously existing boundaries not repaired	Total length of artificially marked boundaries at the close of the year	Length of boundaries still to be demarcated at the close of the year	Length of natural boundaries not requiring artificial marks
1	2	3	4	5	6	7
	Miles	Miles	Miles	Miles	Miles	Miles
Northern Circle ...	.....	9,018	129	9,147	1	724
Central Circle ...	.....	11,652·8	.....	11,652·8	.....	770
Southern Circle ...	1	1,413	12,914	14,323	26	457
Grand Total, Province of Bombay.	1	22,083·8	13,043	35,127·8	27	1,951

and Maintenance of Boundaries, 1939-40

Total length of boundaries at the close of the year	Expenditure on Demarcation during the year		Remarks	
	On new work	On repairs		
8	9	10	11	
Miles	Rs.	Rs.	Rs.	
			3,046	B-V (*a*).
			56	B-VIII.
9,872	.....	3,102	3,102	
19,422·8	.....	600		
14,811	10	1,170	Rs.	
			829	Charged to B. V (*a*).
			351	Charged to B. VIII.
			1,180	Total.
37,095·8	10	4,872		

FORM No: 55.—*Progress made in Working*

Circle	Area under sanctioned Working Plans					Area Work
	At commencement of year	Added during year	Deducted during year	At close of year		Plans under preparation
				Actual area	Percentage of total forest area in (as shown in column 10)	
1	2	3	4	5	6	7
NORTHERN CIRCLE	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Per cent.	Sq. m.
Reserved Forests in charge of the Forest Department.						
Panch Mahals	311	...	...	311	99	4
North Thana	354	...	...	354	100	...
East Thana	431	...	...	431	100	...
West Thana	336	...	...	336	100	...
East Nasik	681	...	...	681	100	...
West Nasik	545	...	1	544	100	...
Surat Sub-Division	99	...	...	99	99	...
Total of Reserved Forests in charge of the Forest Department.	2,757	...	1	2,756	99	4
Protected Forests in charge of the Forest Department.						
North Thana	1	...	...	1	100	...
West Thana	9	...	...	9	75	...
East Nasik	...	...	...	...	...	...
West Nasik	91	...	...	91	90	...
Surat Sub-Division	...	...	...	...	.....	...
Total of Protected Forests in charge of the Forest Department.	101	...	...	101	84	...
Protected Forests in charge of the Revenue Department.						
North Thana	...	...	...	...	.....	134
East Thana	...	...	...	...	.....	101
West Thana	...	...	...	...	.....	115
Total of Protected Forests in charge of the Revenue Department.	...	...	...	...	.....	350
Total, Northern Circle ...	2,858	...	1	2,857	88	354

Plans during the year 1939-40

not under ing Plans		Total forest area in Form No. 5. Part I (Total of columns 5, 7, 8 and 9)	Revision			Expenditure on Working Plans during the year	Remarks
Plans not under preparation							
Required at present	Not required at present		Due or required	In progress at end of year	Revised plans sanctioned during year		
8	9	10	11	12	13	14	15
Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	
...	...	315	...	...	311	.....	
...	...	354	...	8	...	.....	
...	...	431	...	84	...	.....	
...	...	336	...	...	...	.....	
...	...	681	...	...	...	.....	
...	...	544	...	187	...	.....	
...	1	100	78	...	...	.....	
...	1	2,761	78	279	311	.....	
...	...	1	...	...	...	.....	
...	8	12	...	...	...	.....	
4	...	4	...	...	...	.....	
...	10	101	...	...	...	.....	
2	...	2	...	...	...	.....	
6	18	120	...	...	...	.....	
...	...	134	...	...	...	.....	
...	...	101	...	...	...	.....	
...	...	115	...	...	...	.....	
...	...	350	...	...	...	.....	
6	14	3,231	78	279	311	.....	

FORM NO. 55.—*Progress made in Working*

Division	Area under sanctioned Working Plans					Area Work
	At commencement of year	Added during year	Deducted during year	At close of year		Plans under preparation
				Actual area	Percentage of total forest area (as shown in column 10)	
1	2	3	4	5	6	7
	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Per cent.	Sq. m.
CENTRAL CIRCLE						
Reserved Forests						
East Khandesh	1,105	60(*a*)	405(*b*)	760	100	...
West Khandesh	887	405(*b*)	61(*e*)	1,231	82	268(*f*)
Poona	368	...	...	368	100	...
Kolaba	434	...	...	434	97	...
Satara	493	...	...	493	100	...
Total ...	3,287	465	466	3,286	91·9	268
Protected Forests						
Kolaba	...	...	...	...	.....	...
Satara	1	...	...	1	100	...
Total ...	1	...	...	1	2·8	...
Leased Forest						
Satara	21	...	...	21	100	...
Total, Central Circle ...	3,309	465	466	3,308	91·9	268
SOUTHERN CIRCLE						
Kanara, Northern Division ...	401	...	56(*a*) and (*b*)	345	66	...
Do. Eastern do. ...	409	...	...(*b*)	409	88	37(*c*)
Do. Western do. ...	407	...	...(*b*)	407	88	...
Belgaum do. ...	365	56(*a*)	...(*b*)	421	40	...
Dharwar-Bijapur do. ...	429 +19(*d*)	2(*b*)	...(*b*)	431 +19(*d*)	87	...
Total, Southern Circle ...	2,011 +19(*d*)	58	56	2,013 +19(*d*)	48	37
Grand Total, Province of Bombay.	8,197	523	523	8,197	76	659

Plans during the year 1939-40—contd.

not under ing Plans		Total forest area in Form No. 51, Parts I and II (Total of columns 5, 7, 8 and 9)	Revision			Expenditure on Working Plans during the year	Remarks
Plans not under preparation							
Required at present	Not required at present		Due or required	In progress at end of year	Revised plans sanctioned during year		
8	9	10	11	12	13	14	15
Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Rs.	
...	1(c)	761	...	410(d)	...	.....	(a) Area of Chalisgaon transferred from West Khandesh as per G. R., R. D., No. 7262 of 22nd December 1939.
...	8(g)	1,503	...	1,144(h)	...	139	(b) Area of Shirpur East and West Ranges transferred from East Khandesh to West Khandesh as per above G. R.
...	...	868	...	...	...	.....	(c) Afforested area in Acrub jungles.
...	16(i)	450	...	...	...	.....	(d) Satpuda forests.
...	...	493	...	...	...	.....	(e) 60 Sq. ms. area of Chalisgaon.
...	90	3,074	...	1,554	...	.....	1 Sq. m. area disforested during the year.
							61
							(f) Sakri-Pimpalner and Dhulia scrub.
...	85	85	...	...	...	.....	(g) Afforested area in Taloda and Shirpur Ranges.
...	...	1	...	...	...	.....	(h) 793 Sq. ms. Satpuda forests.
							171 Sq. ms. Nawapur-Nandurbar.
							52 Sq. ms. Deomogra.
							107 Sq. ms. Dhulia-Pimpalner-Anjan Working Plan.
...	...	21	...	...	...	.....	21 Sq. ms. Umarpata Working Plan.
							1,144
...	55	3,631	...	1,554	...	139	(i) Area taken over from the Revenue Department.
...	179	524	...	25	...	.....	(a) Organised area of Supa Range transferred to Belgaum Division.
...	618	1,004	57	...	...	1,624	(b) The areas excluded from and included in the Sanctioned Working plans as per Chief Conservator's No. 37/5228 of 17th October 1939 have been taken into account only when they are 8 square mile or more in the case of each Division.
...	665	1,072	97	47	...	.....	
94	545	1,060	...	206	...	3,368	
...	68	494 + 19(d)	...	352	...	.....	
94	2,070	4,214 + 19(d)	154	630	...	4,992	(c) *See* below.
100	2,139	11,095	232	2,468	311	5,131	(d) Area in charge of the Revenue Department.

(c) Approximate area in Sirsi Siddapur Range taken at for enumeration of sandalwood trees for the purpose of framing working plan.

FORM No. 56.—*Statement showing Communications*

Circle	New works				
	Buildings				
	Expenditure on				Total expenditure incurred
	Head quarter houses	Rest houses	Houses for subordinate establishment	Others	
1	2(a)	2(b)	2(c)	2(d)	3
	Rs.	Rs.	Rs.	Rs.	Rs.
Northern Circle ...	454	5,403	6,903	898	13,658
Central Circle ...	.....	.....	2,069	.....	2,069
Southern Circle ...	510	1,221	352	96	2,179
Forest Engineering Division, S. C. .	.....	.....	.....	.....	.....
Grand Total, Bombay Province ...	964	6,624	9,317	994	17,899

and Buildings during the year 1939-40.

undertaken during the year

Roads and paths								Other works	Total expenditure on new works
Cart roads		Bridle paths		Others		Total length of paths or roads	Total expenditure incurred	Expenditure incurred	
Length	Cost	Length	Cost	Length	Cost				
4(a)	4(b)	4(c)	4(d)	4(e)	4(f)	5	6	7	8
M. F.	Rs.	Miles	Rs.	Miles	Rs.	M. F.	Rs.	Rs.	Rs.
.....	180	...	...	...	...	.....	180	1,092	14,930
18 2	961	...	...	...	...	18 2	961	260	3,293
2 0	3,549	...	...	...	...	2 0	3,549	736	6,464
.....	...	...	...	...	...	.....	...	...	.....
20 2	4,690	...	...	...	...	20 2	4,690	2,087	24,676

FORM No. 56.—*Statement showing Communications*

Circle	Repairs				
	Buildings				
	Expenditure on				
	Head quarter houses	Rest houses	Houses for subordinate establishment	Others	Total expenditure incurred
1	9(a)	9(b)	9(c)	9(d)	10
	Rs.	Rs.	Rs.	Rs.	Rs.
Northern Circle ...	436	1,026	4,607	.....	6,069
Central Circle ...	.....	1,689	2,186	140	4,015
Southern Circle ...	662	2,031	3,574	91	6,358
Forest Engineering Division, S. C.	.....	.....	18	.....	18
Grand Total, Bombay Province...	1,098	4,746	10,385	231	16,460

and Buildings during the year 1939-40—contd.

executed during the year										
Roads and paths								Other works		Remarks
Cart roads		Bridle paths		Others		Total length of paths or roads	Total expenditure incurred	Expenditure incurred	Total expenditure incurred	
Length	Cost	Length	Cost	Length	Cost					
11(a)	11(b)	11(c)	11(d)	11(e)	11(f)	12	13	14	15	16
M. F.	Rs.	Miles	Rs.	Miles	Rs.	M. F.	Rs.	Rs.	Rs.	
327 4	12,292	...	...	...	...	327 4	12,292	582	18,048	
488 0	9,263	94	806	53	105	635 0	10,264	257	14,536	
361 0	26,902	...	...	19	25,197	380 0	52,099	2,715	61,172	
...	...	...	...	...	25	...	...	2	46	
1,176 4	48,457	94	806	72	25,417	1,342 4	74,650	3,556	94,696	

FORM No. 58.—*Area of Forest Tracts protected from fire during 1939-40.*

Division.	Area in square miles.		Percentage of forests under fire protection to total area of reserves.	Percentage of failures to area attempted.		Remarks.
	Attempted.	Protected.		Average of past 5 years.	During the year.	
1	2	3	4	5	6	7
NORTHERN CIRCLE.						
Panch Mahals ...	315	297	100	11·8	5·7	
North Thana ...	355	342	100	4·3	3·6	
East do. ...	431	392	100	5·4	9·0	
West do. ...	348	333	100	4·4	4·3	
East Nasik ...	685	677	100	0·2	1·2	
West do. ...	645	636	100	1·5	1·4	
Surat Sub-Division ...	102	101	100	1·4	1·0	
Total, Northern Circle.	2,881	2,778	100	3·8	3·n	
CENTRAL CIRCLE.						
East Khandesh ...	761	629	100	12·2	17·3	
West do. ...	1,502	1,333	100	12·2*	11·3	
Poona ...	368	357	100	2·8	3·0	
Kolaba ...	485	473	100	1·2	2·4	
Satara ...	515	50[illegible]	100	·9	1·3	
Total, Central Circle.	3,631	3,300	100	8·5	9·1	
SOUTHERN CIRCLE.						
Kanara, N. D. ...	39	39	7	6·0	.....	
Do. E. D. ...	166	153	16	4·4	1·9	
Do. W. D. ...	59	58	6	2·9	1·7	
Belgaum Division ...	109	103	10	4·1	5·5	
Dharwar-Bijapur Division.	494	485	100	2·2	1·8	
Total, Southern Circle.	867	838	20·4	3·4	2·2	
Grand Total, Province of Bombay ...	7,369	6,916	88·7	5·8	6·1	

* Includes percentage of North Khandesh Division.

FORM No. 59.—*Causes of Forest fires during 1939-40.*

FORM No. 59.—*Causes of*

Divisions	Fires originating in departmental fire conservancy operations		External fires crossing the fire traces	
	No. of fires	Area burnt acres	No. of fires	Area burnt acres
1	2	3	4	5
NORTHERN CIRCLE.				
Panch Mahals	.....	.....	3	529
North Thana	.....	.....	.....	.....
East do.	1	6	.....	.....
West do.	.....	.....	0	277
East Nasik	2	35	6	846
West do.	.....	.....	2	210
Surat Sub-Division	3	14	2	66
Total, Northern Circle ...	6	55	22	1,927
CENTRAL CIRCLE.				
East Khandesh	.....	.....	23	7,059
West do.	2	53	17	13,865
Poona	4	97	18	717
Kolaba	.....	.....	35	1,170
Satara	.....	.....	9	424
Total, Central Circle ...	6	150	102	24,128
SOUTHERN CIRCLE.				
Kanara, N. D.	.....	.....	.....	.....
Do. E. D.	3	116	4	1,331
Do. W. D.	.....	.....	.....	.....
Belgaum Division	.....	.....	.....	.....
Dharwar-Bijapur Division	1	295	2	418
Total, Southern Circle ...	4	411	6	1,749
Grand Total, Province of Bombay ...	16	616	130	27,804

Forest Fires during 1939-40.

Fires beginning inside the reserved or fire-traced areas				Fires due to causes unknown		Total	
Owing to carelessness of outsiders or due to accident		Owing to intentional or malicious firing					
No. of fires	Area burnt acres	No. of fires	Area burnt acres	No. of fires	Area burnt acres	No. of fires	Area burnt acres
6	7	8	9	10	11	12	13
6	38	17	1,240	131	9,823	157	11,625
9	356	.....	.....	135	7,689	144	8,044
18	608	.....	.....	201	24,339	220	24,953
.....	.....	.....	.....	143	9,735	152	10,013
4	9	.....	.....	46	4,246	58	5,134
89	717	1	275	96	4,748	131	5,946
5	3	.....	.....	2	67	12	150
74	1,725	18	1,515	754	60,641	874	65,863
43	22,621	1	250	42	53,701	109	84,524
72	73,387	4	498	79	21,251	174	109,054
14	1,556	1	5	74	4,789	111	7,163
102	5,696	.....	.....	28	706	165	7,562
36	874	3	26	57	2,605	105*	3,929
267	104,123	9	779	280	83,052	664	212,232
3	795	.....	.....	24	4,331	27	5,186
12	725	.....	.....	10	595	29†	2,767
12	407	.....	.....	27	474	39	881
51	19,214	.....	.....	.....	.....	51	19,214
1	40	.....	.....	46	5,341	50	6,094
79	21,181	.....	.....	107	10,801	196	34,142
420	127,029	27	2,294	1,141	154,494	1,734	312,237

* Includes 3 C. A. offences.

† Includes 1 forest fires which occurred in a contract area and was dealt with under the terms of the agreement and not as a breach of Forest Rules.

FORM NO. 60.—*Area closed and open to grazing during 1939-40.*

Area in square miles

Division	Closed to all animals		Open to grazing				Remarks
			Of all animals		Of all animals except browsers (camels, sheep and goats)		
	Whole year	Part of year	Whole year	Part of year	Whole year	Part of year	
1	2	3	4	5	6	7	
NORTHERN CIRCLE.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	Sq. m.	
Panch Mahals	64	19	...	...	246	...	
North Thana	39	1	135	...	314	...	
East do.	36	...	102	...	394	...	
West do.	17	...	115	...	331	...	
East Nasik	55	28	180	...	459	...	
West do.	43	33	115	...	561*	...	
Ahmedabad	...	...	13	...	...	...	
Surat Sub-Division ...	20	...	15	...	70	...	
Total, Northern Circle ...	273	87	675	...	2,385	...	
CENTRAL CIRCLE.							
East Khandesh	180	116	57	...	409	56	
West do.	214	...	209	...	1,247	...	
Poona	43	31	251	...	257	6	
Kolaba	29	...	102	...	416	4	
Satara	24	19	183	...	475	...	
Ahmednagar and Sholapur ...	...	...	637	...	...	...	
Total, Central Circle ...	490	166	1,419	...	2,804	66	
SOUTHERN CIRCLE.							
Kanara, N. D.	42	...	4	...	482	...	
Do. E. D.	48	...	...	...	1,197	...	
Do. W. D.	12	...	...	...	1,083	...	
Belgaum Division	104	...	8	...	957	...	
Dharwar-Bijapur Division ...	59	...	169	...	415	...	
Total, Southern Circle ...	265	...	181	...	4,134	...	
Grand Total, Province of Bombay ...	1,018	253	2,275	...	9,323	66	

* Excludes 2 square miles of area submerged in the Bhandardara Lake.

FORM No. 61.—*Return of Grazing in the State Forests during 1939-40.*

FORM No. 61.—*Return of Grazing in*

Division	Grazing					
	At Full Rates					
	Buffaloes	Cows and Bullocks	Goats and Sheep	Camels	Other animals	Fees received
1	2	3	4	5	6	7
NORTHERN CIRCLE	No.	No.	No.	No.	No.	Rs.
Reserved and Protected Forests						
Panch Mahals ...	52	238	.....	.....	.....	290
North Thana ...	.....	.....	.....	.....	.....	.....
East do. ...	.....	10	.....	.....	.....	10
West do. ...	.....	.....	.....	.....	.....	.....
East Nasik ...	.....	168	1,802	.....	40	649
West do. ...	.....	.....	.....	.....	.....	.....
Surat Sub-Division ...	11	90	.....	.....	.....	101
Total, Northern Circle...	63	496	1,802	.....	40	1,050
CENTRAL CIRCLE						
East Khandesh ...	1,598	6,170	.....	.....	181	7,949
West do. ...	73	528	.....	.....	.....	601
Poona ...	20	51	.....	.....	.....	71
Kolaba ...	.....	12	.....	.....	.....	13
Satara ...	.....	48	335	.....	.....	144
Total ...	1,691	6,809	335	.....	181	8,777

Total refund of grazing fees was Rs. 2,636-14-0.

the State Forests during 1939-40.

on payment						
At Privileged Rates						
Buffaloes	Cows and Bullocks	Goats and Sheep	Camels	Other animals	Fees received	
					Actual	Value at full rates
8	9	10	11	12	13	14
No.	No.	No.	No.	No.	Rs.	Rs.
99	139	.....	.....	.....	119	238
48	354	.....	.....	.....	201	402
.....	.....	.....	.....	.....	.....	.....
2	22	.....	.....	.....	9	24
489	1,254	.....	.....	7	675	1,750
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
638	1,769	.....	.....	7	1,204	2,414
299	699	.....	.....	.....	258	998
.....	.....	.....	.....	.....	.....	.....
.....	43	.....	.....	.....	21	43
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
229	742	.....	.....	.....	270	971

FORM No. 61.—*Return of Grazing in*

Division	Grazing					
	By right under Settlement					
	Buffaloes	Cows and Bullocks	Goats and Sheep	Camels	Other animals	Value of fees at full rates
I	15	15	17	18	19	20
NORTHERN CIRCLE	No.	No.	No.	No.	No.	Rs.
Reserved and Protected Forests						
Panch Mahals ...	.....	.....	.....	.....	.....	.....
North Thana ...	.....	.....	.....	.....	.....	.....
East do. ...	.....	.....	.....	.....	.....	.....
West do. ...	.....	.....	.....	.....	.....	.....
East Nasik ...	.....	.....	.....	.....	.....	.....
West do. ...	.....	.....	.....	.....	.....	.....
Surat Sub-Division ...	.....	.....	.....	.....	.....	.....
Total, Northern Circle...	.....	.....	.....	.....	.....	.....
CENTRAL CIRCLE						
East Khandesh ...	.....	.....	.....	.....	.....	.....
West do. ...	.....	.....	.....	.....	.....	.....
Poona ...	.....	.....	.....	.....	.....	.....
Kolaba ...	380	1,141	.....	.....	.....	1,521
Satara ...	14	40	.....	.....	.....	54
Total ...	394	1,181	.....	.....	.....	1,575

the State Forests during 1939-40—contd.

free							
During pleasure of Government or otherwise than under Settlement						Total value of fees at full rates, column 20 + column 26	Grand Total of value at full rates
Buffaloes	Cows and Bullocks	Goats and Sheep	Camels	Other animals	Value of fees at full rates		
21	22	23	24	25	26	27	28
No.	No.	No.	No.	No.	Rs.	Rs.	Rs.
23,969	104,047	.....	.....	.....	1,28,016	1,28,016	1,28,544
16,003	79,183	.....	.....	.....	95,185	95,185	95,587
6,866	58,826	.....	.....	.....	65,692	65,692	65,702
22,171	78,909	867	.....	610	1,01,907	1,01,907	1,01,931
13,670	97,724	22,998	.....	1,815	1,36,458	1,36,458	1,38,857
12,832	109,516	7,372	.....	298	1,24,489	1,24,489	1,24,489
2,089	16,176	.....	.....	.....	18,765	18,765	18,866
98,099	544,381	101,237	.....	2,723	6,70,512	6,70,512	6,73,976
22,997	127,403	.....	.....	1,593	1,51,993	1,51,993	1,50,870
23,290	150,266	6,336	.....	904	1,75,044	1,75,044	1,75,645
15,721	89,347	26,026	.....	2,252	1,13,827	1,13,827	1,13,941
18,059	43,833	50	.....	9	61,913	63,434	63,446
13,470	36,807	17,823	.....	30	54,763	54,817	54,961
92,537	447,656	50,235	.....	4,788	5,57,540	5,59,115	5,58,363

FORM No. 61.—*Return of Grazing in*

Division.	Grazing					
	At Full Rates.					
	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Fees received.
1	2	3	4	5	6	7
SOUTHERN CIRCLE.	No.	No.	No.	No.	No.	Rs.
Kanara N. D. ...	.....	.....	.....	.....	.....	.....
Do. E. D. ...	.....	.....	.....	.....	.....	.....
Do. W. D. ...	.....	.....	.....	.....	.....	.....
Belgaum ...	44	124	.....	.....	.....	168
Dharwar-Bijapur ...	.....	.....	.....	.....	.....	.....
Total, Southern Circle...	44	124	.....	.....	.....	168
Grand Total, Province of Bombay.	1,798	7,429	2,167	.....	221	9,995

the State Forests during 1939-40—contd.

'on payment.

At Privileged Rates.						
Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Fees received.	
					Actual.	Value at full rates.
8	9	10	11	12	13	14
No.	No.	No.	No	No.	Rs.	Rs.
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....
867	2,511	.....	.....	7	1,483	3,385

FORM No. 61.—*Return of Grazing in*

Division.	Grazing					
	By right under Settlement.					
	Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Value of fees at full rates.
1	15	16	17	18	19	20
SOUTHERN CIRCLE.	No.	No.	No.	No.	No.	Rs.
Kanara N. D. ...	.....	.....	.....	.....	.....	.....
Do. E. D. ...	.....	.....	.....	.....	.....	.....
Do. W. D. ...	.....	.....	.....	.....	.....	.....
Belgaum ...	.....	.....	.....	.....	.....	.....
Dharwar-Bijapur ...	.....	.....	.....	.....	.....	.....
Total, Southern Circle...	.....	.....	.....	.....	.....	.....
Grand Total, Province of Bombay.	394	1,181	.....	.....	.....	1,575

the State Forests during 1939-40—concld.

free.				During pleasure of Government or otherwise than under Settlement.		Total value of fees at full rates, col. 20 + col. 26.	Grand Total of value at full rates.
Buffaloes.	Cows and Bullocks.	Goats and Sheep.	Camels.	Other animals.	Value of fees at full rates.		
21	22	23	24	25	26	27	28
No.	No.	No.	No.	No.	Rs.	Rs.	Rs.
4,850	20,864	74	.....	3	25,800	25,800	25,800
18,284	63,909	1,642	.....	45	83,880	83,880	83,880
11,464	70,669	323	.....	.....	82,456	82,456	82,456
21,505	55,112	23,094	.....	.....	99,411	99,411	99,579
92,004	28,284	63,029	.....	.....	1,83,317	1,83,317	1,83,317
147,816	238,838	88,162	.....	48	4,74,864	4,74,864	4,75,032
3,38,462	13,30,575	2,39,634	.....	7,559	17,09,916	17,04,491	17,17,871

FORM No. 63.—*Outturn (in thousand cubic feet, solid) of Timber*

Circle	Timber					
	Government	Purchasers	Free Grantees	Right and privilege holders	Total	Government
1	2	3	4	5	6	7
	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	c. ft.
Reserved Forests.						
Northern Circle	51	2,012	14	...	2,077	403
Protected Forests.						
Northern Circle	...	397	4	...	401	...
Unclassed Forests.						
Northern Circle	...	506	1	...	507	...
Total, Northern Circle ...	51	2,915	19	...	2,985	403
Reserved Forests.						
Central Circle	93	806	41	...	940	533
Reserved Forests.						
Southern Circle	792 Sandalwood as shown in columns 13 to 17.	1,485	52*	116	2,445 Sandalwood as shown in columns 13 to 17.	2
Protected Forests.						
Southern Circle	As shown in columns 13 to 17.	...	...	...	As shown in columns 13 to 17.	...
Unclassed Forests.						
Southern Circle	...	...	...	...	...	...
Total, Southern Circle ...	792	1,485	52*	116	2,445	2
Grand Total, Province of Bombay ...	936	5,206	112*	116	6,370	938

* Granted free to

and Fuel during the year 1939-40 and Agency of Exploitation.

Fuel				Timber and fuel	Total Outturn					Remarks
					Sandalwood		Rejected Sandalwood			
					Billets, roots, etc.		Trees, billets, branches, roots, chips, etc.			
Purchasers	Free Grantees	Right and privilege holders	Total		Scented.	Unscented.	Number.	C.ft.	Cartloads Numbers.	
8	9	10	11	12	13	14	15	16	17	18
c. ft.	c. ft.	c. ft.	c. ft.	c. ft.	T. C. Q. lbs.	Ct. Q. lbs.				
7,109	...	10,614	18,126	20,203	.....	...	...	...	...	
217	...	408	625	1,026	.....	...	...	...	...	
489	...	...	489	996	.....	...	...	...	...	
7,816	...	11,622	19,240	22,225	.....	...	...	...	...	
4,754	105	6,905	12,297	13,237	0 17 3 20	...	...	...	...	
6,163	...	10,075	16,240	18,685	203 16 3 5	1 2 20	(b) 1,319 (c) 9,680 (d) 9,004	(a)1671	(e) 415 (c) 13	(a) Bachichalav and Kodlichalav. (b) Trees. (c) Branches and pieces. (d) Roots and stumps; (e) Chips.
...	...	...	...	...	7 14 0 13	...	(c) 165 (d) 130	(a) 172	...	
...	...	...	...	...	.....	...	...	...	...	
6,163	...	10,075	16,240	18,685	211 10 3 18	1 2 20	(b) 1,319 (c) 9,845 (d) 9,134	(a) 1,843	(e) 415 (c) 13	
18,732	105	28,002	47,777	54,147	212 8 3 10	1 2 20	(b) 1,319 (c) 9,815 (d) 9,134	(a) 1,643	(e) 415 (c) 13	

Local Boards 1 000 c.ft.

FORM No. 64.—*Outturn of Minor Forest Produce for the year 1939-40.*

Description of produce	Produce Removed or Utilized								Total	
	By Government agency		By purchasers		By free-grants		By right holders			
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
NORTHERN CIRCLE		Rs.		Rs.		Rs.		Rs.		Rs.
Reserved Forests.										
Bamboos	...	23	...	15,895	...	285	...	64,527	...	80,720
Grass and grazing ...	...	...	...	53,814	...	...	...	8,09,110	...	8,62,924
Apta—Temburni leaves...	...	...	...	18,555	...	...	...	3,031	...	21,586
Karvi	...	...	...	1,560	...	...	...	20,408	...	21,968
Moho flowers	...	...	...	1,465	...	...	...	...	...	1,465
Stones and sand ...	...	...	...	1,077	...	4,857*	...	10,368	...	16,302
Hirda	...	1,286	...	1,068	...	...	...	...	...	2,354
Babul sticks	...	...	...	1,055	...	...	...	...	...	1,055
Gum	...	...	...	1,102	...	...	...	153	...	1,255
Tarwad	...	...	...	1,258	...	...	...	...	...	1,258
Rosha Grass	...	...	...	1,575	...	...	...	...	...	1,575
Thorns	...	...	...	...	...	...	...	17,101	...	17,101
Magnese Ore	...	...	...	727	...	...	...	...	...	727
Dry leaves	...	...	...	2,177	...	...	...	...	...	2,177
Miscellaneous	...	6	...	4,145	...	10	...	54,926	...	59,087
Total ...	...	1,315	...	1,05,463	...	5,152	...	9,79,674	...	10,91,604
Protected Forests.										
Bamboos	...	...	...	...	...	...	...	11,064	...	11,064
Karvi	...	...	...	...	...	...	...	4,193	...	4,193
Thorns	...	...	...	...	...	...	...	1,427	...	1,427
Grass and grazing ...	...	...	...	...	...	...	...	1,50,493	...	1,50,493
Stones and sand ...	...	...	...	...	...	...	...	2,000	...	2,000
Miscellaneous	...	...	...	913	...	...	...	9,070	...	9,983
Total ...	...	...	...	913	...	...	...	1,57,252	...	1,58,165
Total, Northern Circle.	...	1,315	...	1,06,376	...	5,152	...	11,66,926	..	12,79,769

* Stone with Rs. 4,857 worked round the D. L. W. D. and Local Boards.

FORM No. 64.—*Outturn of Minor Forest Produce for the year 1939-40*—contd.

Description of produce	Produce Removed or Utilized								Total	
	By Government agency		By purchasers		By free-grants		By right holders			
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
CENTRAL CIRCLE		Rs.		Rs.		Rs.		Rs.		Rs.
Reserved Forests										
Bamboos ...	...	...	...	9,849	...	603	...	...	...	10,452
Grass and Grazing ...	...	...	...	1,07,247	...	...	...	6,26,711	...	7,33,958
Tarwad bark ...	...	...	...	707	...	...	...	...	...	707
Apta-Temburni leaves.	...	...	...	4,785	...	...	...	6,331	...	11,116
Ghatbor fruit ...	...	...	...	1,111	...	...	...	...	...	1,111
Rosha grass ...	...	...	...	1,812	...	...	...	...	...	1,812
Lac	...	..	...	382	...	...	...	...	...	382
Skins	...	...	...	13	...	...	...	...	...	13
Earth and Murum ...	...	...	...	1,528	...	12,749(a)	...	3,583	...	17,860
Stone	...	...	...	474	...	11,633(a)	...	295	...	12,402
Nirgudi Shirali ...	...	...	...	657	...	6	...	...	...	663
Anjan leaves ...	...	...	...	3,384	...	...	...	...	...	3,384
Thorns	...	...	...	1,097	...	56	...	58	...	1,211
Kilchan	...	...	...	87	...	...	...	...	...	87
Manure	...	...	...	3,003	...	...	...	...	...	3,002
Safed Musali ...	...	...	...	533	...	...	...	...	...	533
Kudhai Gum ...	...	...	...	2,959	...	...	...	..	...	2,959
Palas leaves ...	...	...	...	53	...	...	...	...	...	53
Chilhar bark ...	...	...	...	439	...	...	...	...	...	439
Mango fruit ...	...	...	...	156	...	...	...	...	...	156
Tolambi	...	...	...	1,161	...	...	...	...	...	1,161
Mhowra flowers ...	...	...	...	2,300	...	...	...	...	...	2,300
Lantana	...	...	...	30	...	13	...	...	...	43
Karvi	...	...	...	84	...	8	...	8,874	...	8,961
Hirda and Shikekai ...	...	...	...	5,813	...	...	...	...	...	5,813
Miscellaneous ...	...	...	...	3,165	...	93(b)	...	1,02,948	...	1,06,206
Total, Reserved Forest ...	...	...	...	1,52,523	...	25,156	...	7,48,800	...	9,26,784
Protected Forests										
Grass and Grazing ...	...	...	...	...	...	...	...	...	...	...
Miscellaneous ...	...	...	...	189	...	...	...	...	...	189
Total, Protected Forests ...	...	...	...	189	...	...	...	..	...	189
Leased Forests										
Grass and Grazing ...	...	...	...	382	...	...	...	...	...	383
Miscellaneous ...	...	...	...	37	...	309,c)	...	...	...	346
Total, Leased Forests ...	...	...	...	419	...	309	...	...	...	728
Total, Central Circle ...	...	...	...	1,53,436	...	25,465	...	7,48,800	...	9,27,701

(a) Includes free grant worth Rs. 21,352 to P.W.D. and Local bodies.

(b) Includes free grant worth Rs. 16 to Local bodies.

(c) Includes free grant worth Rs. 256 to P. W. D and Local bodies

FORM No. 64.—*Outturn of Minor Forest Produce for the year 1939-40*—concld.

Description of produce	Produce Removed or Utilized								Total	
	By Government agency		By purchasers		By free-grants		By right holders			
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
SOUTHERN CIRCLE		Rs.		Rs.		Rs.		Rs.		Rs.
Reserved Forests										
Bamboos ...	...	20	...	64,023	...	(a) 1 (c) 1,439	...	3,025	...	68,508
Grass and Grazing ...	...	...	...	363	...	...	...	4,84,307	...	4,84,670
Honey and wax ...	...	...	...	1,978	...	...	...	...	...	1,978
Tumri leaves ...	...	...	...	1,498	...	...	...	...	...	1,498
Halmaddi Dhup ...	...	...	...	2,842	...	...	...	...	...	2,842
Harda	...	...	...	5,669	...	...	...	...	...	5,669
Tali palms	...	...	...	364	...	(c) 4,366	...	...	...	4,730
Earth, and Murrum ...	...	...	...	85	...	(b) 420	...	553	...	1,058
Stones	...	...	...	3,226	...	(a) 7 (b) 64 (c) 860	...	1,256	...	4,913
Metal	...	...	...	805	...	(a) 3,222 (b) 2,851 (c) 2	...	8	...	6,888
Leaves and Soppa ...	...	...	...	20	...	...	...	24,090	...	24,110
Karvi	...	...	...	86	...	(c) 2	...	718	...	756
Bandurbi ...	...	...	...	581	...	...	...	...	...	581
Tarwad bark ...	...	...	...	2,277	...	...	...	...	...	2,277
Shigekai	...	...	...	2,836	...	...	...	...	...	2,836
Canes	...	...	...	230	...	(a) 2	...	1,971	...	2,212
Creepers	...	...	...	9	...	(c) 3 (a) 4	...	905	...	920
Stakes	...	...	...	105	...	(a) 2 (c) 14	...	6,351	...	6,472
Thorns	...	...	...	460	...	...	...	7,344	...	7,804
Miscellaneous ...	...	2,000	...	3,172	...	10 (b)	...	2,331	...	7,513
					Protected Forest. Nil.					
					Unclassed Forest. Nil.					
Total, Southern Circle ...	...	2,020	..	90,588	...	12,768	...	5,32,859	...	6,38,235
GRAND TOTAL, BOMBAY PROVINCE.	...	3,385	...	3,50,400	...	43,385	...	24,48,585	...	28,45,705

(*a*) Removed by Local Boards.
(*b*) Removed by other Government Departments.
(*c*) Removed by free grantees.

FORMS Nos. 65 and 66 (combined).

COMBINATION OF FORMS NOS. 65 AND 66.—*Account of Timber and depôts, sold locally or otherwise disposed*

Name of Division.	Balance at commencement of the year in forests and sale depôts.		Received during the year.
1	2	3	4
NORTHERN CIRCLE.	C. ft.	Rs.	C. ft.
Panch Mahals—			
Teak	95	12	1,741
North Thana—			
Teak	13,318	3,330	11,520
Injaili	8,665	677	7,565
Total ...	21,983	4,007	19,085
East Thana—			
Teak	10,993	1,832	12,269
Injaili	4,889	407	3,623
Total ...	15,882	2,239	15,892
West Thana—			
Teak	1,791	895	6,767
Injaili	15	4	1,725
Total ...	1,806	899	8,492
East Nasik—			
Teak	.....	.....	817
West Nasik—			
Teak	846	424	4,212
Injaili	.....	.....	23
Total ...	846	424	4,235
Surat Sub-Division—			
Teak	986	130	763
Injaili	.....	.....	23
Total ...	986	130	786
Total, Timber { Teak ...	28,029	6,623	38,089
Total, Timber { Injaili ...	13,569	1,088	12,959
Total ...	41,598	7,711	51,048
Fuel—			
Panch Mahals	1,188	48	13,973
North Thana	1,03,152	81	1,93,597
East Thana	82,495	206	1,52,648
West Thana	24,282	485	34,085
East Nasik	1,103	10	1,710
West Nasik	830	52	1,511
Surat Sub-Division	1,950	20	5,400
Total, Fuel ...	2,15,000	902	4,02,914
Total, Timber and Fuel ...	2,56,598	8,613	4,53,962

* Not difference in favour

other produce cut or collected by Government Agency and brought to of during the year 1939-40.

Total.	Disposed of during the year.	Balance in hand at the close of the year in forests and sale depôts.		Difference in value.	
				In favour of the year.	Against the year.
5	6	7	8	9	10
C. ft.	C. ft.	C. ft.	Rs.	Rs.	Rs.
1,836	1,783	53	10	.....	2
24,838	11,322	13,516	3,379	49	.....
16,230	4,544	11,686	913	236	.....
41,068	15,866	25,202	4,292	285	.....
23,262	11,556	11,706	1,951	119	.....
8,512	3,677	4,835	403	.....	4
31,774	15,233	16,541	2,354	119	4
8,558	7,211	1,347	673	.....	222
1,740	1,562	178	45	41	.....
10,298	8,773	1,525	718	41	222
817	235	582	291	291	....
5,058	2,163	2,895	1,448	1,024	.....
23	23	.....	.....	.....	.....
5,081	2,186	2,895	1,448	1,024	.....
1,749	1,581	168	35	.....	95
23	11	12	2	2	.....
1,772	1,592	180	37	2	95
66,118	35,851	30,267	7,767	1,489	319
26,528	9,817	16,711	1,363	279	4
92,646	45,668	46,978	9,150	1,762	323
15,161	14,667	494	20	.....	28
2,96,739	91,974	2,04,765	224	143	.....
2,35,143	1,60,665	74,478	186	.....	20
58,367	42,668	15,699	314	.....	171
2,813	2,083	730	7	.....	3
2,341	2,290	51	3	.....	49
7,350	6,725	625	6	.....	14
6,17,914	3,21,072	2,96,842	760	143	285
7,10,560	3,66,740	3,43,820	9,910	1,905	608*

of the year 1297.

COMBINATION OF FORMS NOS. 65 AND 66.—*Account of Timber and depots, sold locally or otherwise disposed*

Name of Division.	Balance at commencement of the year in forests and sale depots.		Received during the year.
1	2	3	4
	C. ft.	Rs.	Rs.
NORTHERN CIRCLE—*contd.*			
Minor Forest Produce.			
Bamboos—			
Panch Mahals	.....	.....	6
West Nasik	.....	.....	5
Surat Sub-Division	.....	.....	12
Total ...	.....	.....	23
Sandalwood—			
West Nasik	.....	.....	75
Other minor produce.			
Panch Mahals	.....	.....	6
West Nasik	.....	.....	1,286
Total ...	.....	.....	1,292
CENTRAL CIRCLE.			C. ft.
Timber.			
East Khandesh	4,934	623	8,404
West Khandesh	94,334	5,860	4,391
Poona	3,884	2,020	17,590
Kolaba	28,501	1,995	62,628
Satara	166	8	.....
Total ...	1,31,319	10,506	93,213
Fuel.			
East Khandesh	5,900	99	53,775
West Khandesh	10,623	218	96,844
Poona	2,137	944	1,60,637
Kolaba	72,746	3,572	1,39,282
Satara	82,688	3,502	58,703
Total ...	1,74,144	8,330	5,09,241
Charcoal.			
Satara	2,471	188	23,516

other produce cut or collected by Government Agency and brought to of during the year 1939-40—contd.

Total.	Disposed of during the year.	Balance in hand at the close of the year in forests and sale depots.		Difference in value.	
				In favour of the year.	Against the year.
5	6	7	8	9	10
Rs.	Rs.	C. ft.	Rs.	Rs.	Rs.
6	6	.....	.....	.....	.....
5	5	.....	.....	.....	.....
12	12	.....	.....	.....	.....
23	23	.....	.....	.....	.....
75	75	.....	.....	.....	.....
6	6	.....	.....	.....	.....
1,286	1,286	.....	.....	.....	.....
1,292	1,292	.....	.....	.....	.....
C. ft.	C. ft.				
13,338	3,445	9,893	1,441	818	.....
98,725	95,351	3,374	211	.....	5,619
20,974	20,932	42	25	.....	1,995
91,329	79,264	12,065	928	.....	1,067
166	166	.....	.....	.....	8
2,24,532	1,99,158	25,374	2,605	818	8,719
59,675	3,450	56,225	1,077	978	.....
107,467	68,357	39,110	782	569	.....
1,62,824	1,61,254	1,570	78	.....	866
2,12,028	1,74,605	37,423	2,592	.....	980
1,41,391	47,565	93,826	3,742	240	.....
6,83,385	4,55,231	2,28,154	8,271	1,787	1,846
25,987	15,685	10,302	515	127	.....

Net difference in favour of the year Rs. 7,(33.

COMBINATION OF FORMS NOS. 65 AND 66.—*Account of Timber and depots, sold locally or otherwise disposed*

Name of Division.	Balance at commencement of the year in forests and sale depots.		Received during the year.
1	2	3	4
	C. ft.	Rs.	Rs.
CENTRAL CIRCLE—*contd.*			
Sandalwood	.....	.....	327
			C. ft.
Total, Central Circle ...	3,07,934	19,024	6,25,970
			Rs.
Timber, fuel, Charcoal and Sandalwood ...	.....	.....	327
SOUTHERN CIRCLE.			
Timber.			
Kanara, Northern Division—			C. ft.
Teak	358,315	4,15,274	4,40,961
Blackwood	4,399	5,702	6,145
Junglewood	16,181	20,229	26,018
Total ...	378,895	4,41,005	4,73,124
Kanara, Eastern Division—			
Teak	14,260	779	63,038
Junglewood	23	10	249
Total ...	14,283	789	63,287
Kanara, Western Division—			
Teak	12,616	15,633	49,020
Blackwood	4,308	4,825	.....
Junglewood	6,066	6,793	.....
Total ...	22,990	27,251	49,020
Belgaum Division—			
Teak	666	20	1,75,777
Junglewood	.....	.....	22,485
Total ...	666	20	1,98,262
Dharwar-Bijapur Division—			
Teak	1,420	355	7,835
Junglewood	333	66	575
Total ...	1,753	421	8,410
Total, Timber—			
Teak	387,277	4,32,061	7,16,631
Blackwood	8,707	10,327	6,145
Junglewood	22,603	27,098	49,327
Total ..	418,587	4,69,486	7,72,103

other produce cut or collected by Government Agency and brought to of during the year 1939-40—contd.

Total.	Disposed of during the year.	Balance in hand at the close of the year in forests and sale depots.		Difference in value.	
				In favour of the year.	Against the year.
5	6	7	8	9	10
Rs.	Rs.	C. ft.	Rs.	Rs.	Rs.
327	327	.....	.....	.....	.....
C. ft.	C. ft.				
933,904	670,074	263,830	11,391	2,932	10,565
Rs.	Rs.				
327	327	.....	.....	.....	.....
C. ft.	C. ft.				
799,276	369,192	430,084	5,20,312	1,05,038	.....
10,544	7,771	2,773	3,469	.....	2,033
42,199	33,881	8,318	10,512	.....	9,717
852,019	410,844	441,175	5,34,293	1,05,038	11,750
77,298	52,267	25,031	1,022	243	.....
272	102	170	5	.....	5
77,570	52,369	25,201	1,027	243	5
61,636	28,285	33,351	25,701	10,068	.....
4,308	3,541	767	943	.....	3,882
6,066	6,066	.....	.....	.....	6,793
72,010	37,892	34,118	26,644	10,068	10,675
176,448	176,448	.....	.....	.....	20
22,485	22,485	.....	.....	.....	.....
198,928	198,928	.....	.....	.....	20
9,255	4,669	4,586	405	50	.....
908	840	68	24	.....	42
10,163	5,509	4,654	429	50	42
1,123,908	630,856	493,052	5,47,440	1,15,399	20
14,852	11,312	3,540	4,412	.....	5,915
71,930	63,374	8,556	10,541	.....	16,557
1 210,690	705,542	505,148	5,62,393	1.15,399	22,492

COMBINATION OF FORMS NOS. 65 AND 66.—*Account of Timber and depots, sold locally or otherwise disposed*

Name of Division.	Balance at commencement of the year in forests and sale depots.		Received during the year.
1	2	3	4
SOUTHERN CIRCLE—*contd.*	C. ft.	Rs.	C. ft.
Fuel and Charcoal.			
Kanara, Northern Division	.....	.....	324
Dharwar-Bijapur Division	425	17	1,825
Total, Fuel and Charcoal ...	425	17	2,149
Bamboos.			Rs.
Kanara, Eastern Division	.....	.....	3
Dharwar-Bijapur Division	.....	.....	17
Total, Bamboos ...	.....	.....	20
Sandalwood.			
Kanara, Northern Division	.....	1,700	575
Kanara, Eastern Division	.....	6,297	6,525
Kanara, Western Division	.....	.....	108
Belgaum Division	.....	15,800	19,138
Dharwar-Bijapur Division	.....	70,058	56,273
Total, Sandalwood ...	.....	93,855	82,619*
Other Minor Forest Produce.			
Kanara, Western Division	.....	.....	2,000
Drift and Waifwood and confiscated Forest Produce.			
Kanara, Western Division	.....	.....	192
Total, Southern Circle. { Timber and fuel C. ft. ...	419,012	4,69,503	C. ft. 794,252
{ Sandalwood and minor Forest Produce Rs. ...	.....	93,855	Rs. 84,831
Grand Total, Bombay Province. { Timber, fuel and Charcoal C. ft. ...	983,544	4,97,140	C. ft. 1,874,184
{ Sandalwood and minor Forest Produce Rs. ...	.....	Rs. 93,855	Rs. 86,450

* Net difference in favour of the year Rs. 67,483.

other produce cut or collected by Government Agency and brought to of during the year 1939-40—concld.

Total.	Disposed of during the year.	Balance in hand at the close of the year in forests and sale depots.		Difference in value.	
				In favour of the year.	Against the year.
5	6	7	8	9	10
C. ft.	C. ft.	C. ft.	Rs.	Rs.	Rs.
324	258	66	22	22	.....
2,250	850	1,400	40	23	.....
2,574	1,108	1,466	62	45	.....
Rs. 3	Rs. 3	.....	.....	.....	.....
17	17	.....	.....	.....	.....
20	20	.....	... ..	.....	.....
2,275	1,265	.....	1,010	.....	690
12,822	6,348	.....	6,474	177	.....
108	6	.....	102	102	.....
34,938	19,448	.....	15,490	.....	310
1,26,331	63,196	.....	43,135	.....	26,923
1,76,474	1,10,263	.....	66,211	279	27,923
2,000	.....	.....	2,000	2,000	.....
192	17	.....	175	175	.....
C. ft. 1,213,264	C. ft. 706,650	506,614	5,62,455	1,15,444*	22,492
Rs. 1,78,686	Rs. 1,10,800	.....	68,386	2,454	27,923
C. ft. 2,857,728	C. ft. 1,743,464	1,114,264	5,83,756	1,20,281†	33,665
Rs. 1,80,305	Rs. 1,11,919	.....	68,386	2,454	27,923

† Net difference in favour of the year Rs. 61,147.

FORM No. 68.—*Summary of Revenue and Expenditure*

Budget Head	Direction	Panch Mahals Division	North Thana Division	East Thana Division
NORTHERN CIRCLE	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
REVENUE				
X.—Forest.				
I.—Timber and other produce removed from the forest by Government Agency—				
a. Timber	.....	431 6 0	254 1 6	1 8 0
b. Firewood and charcoal ...	.....	814 4 0	620 1 0	0 12 0
c. Bamboos	.....	6 0 0	.....	.....
d. Sandalwood	.....	.....	.....	.....
e. Grass and other minor produce.	.....	5 8 0	.....	.....
Total I ...	.....	1,257 2 0	874 2 6	2 4 0
II.—Timber and other produce removed from the forest by consumers or purchasers—				
a. Timber	.....	1,36,542 0 9	5,37,697 4 1	2,39,303 5 11
b. Firewood and charcoal ...	.....	2,875 10 3	437 6 0	340 5 9
c. Bamboos	.....	855 11 9	5,781 15 3	337 14 0
d. Grazing and fodder grass ...	.....	14,243 10 0	14,489 14 0	698 0 0
e. Other minor produce ...	.....	7,891 1 8	3,105 6 6	5,295 11 0
f. Other Items	.....	.....	.....	.....
g. Commutation fees	.....	.....	.....	.....
Total II ...	.....	1,64,408 3 5	5,61,511 13 10	2,45,975 4 8
III.—Drift and waif wood and confiscated forest produce ...	.....	41 8 0	103 2 0	0 4 0
Total III ...	.....	41 8 0	103 2 0	0 4 0
IV.—Revenue from forest not managed by Government—				
a. Duty on foreign timber and other forest produce.	.....	.....	.....	.....
b. Revenue from shared and private forests.	.....	.....	.....	250 0 0
Total IV ...	.....	.....	.....	250 0 0
V.—Miscellaneous—				
a. Fines and forfeitures ...	.....	1,189 10 0	2,668 0 0	4,227 12 6
b. Refunds	.....	29 0 0	25 5 0	24 2 0
c. Other sources	2,275 4 0	13,688 2 3	8,598 8 8	8,913 12 0
d. Recoveries of Establishment Charges.	.....	.....	.....	.....
e. Contribution of leave salary of officers but on foreign service.	.....	.....	.....	.....
Total V ...	2,275 4 0	14,906 12 3	11,291 13 3	13,165 10 6
Gross Total Revenue ...	2,275 4 0	1,78,613 8 8	5,73,780 15 7	2,59,393 7 2
Deduct—Refunds ...	.....	*—158 6 0*	*—50 2 0*	*—237 6 0*
Net Revenue ...	2,275 4 0	1,78,455 2 8	5,73,278 13 7	2,59,156 1 2

of the different Divisions for the financial year 1939-40.

West Thana Division	East Nasik Division	West Nasik Division	Surat Sub-Division	Total for 1939-40
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
852 6 0	2 13 0	44 6 6	238 3 0	1,874 10 0
60 10 0	29 0 0	.....	4 12 0	1,529 7 0
.....	.....	4 8 0	12 0 0	92 8 0
.....	.....	75 0 0	.....	75 0 0
.....	.....	1,286 0 0	.....	1,291 8 0
918 0 0	31 13 0	1,409 14 6	304 14 0	4,793 1 0
2,47,550 6 9	18,237 4 6	73,408 6 0	66,543 13 0	13,04,283 1 0
896 4 6	9,678 8 0	2,496 2 0	2,162 5 0	18,486 6 6
2,049 15 6	52 10 6	1,767 12 0	6,039 6 6	15,885 5 0
70 4 0	10,531 8 0	13,543 8 0	237 2 0	53,813 14 0
4,511 10 6	7,416 7 6	6,984 4 6	1,522 12 9	36,677 5 11
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
2,54,078 0 3	40,916 6 0	88,150 0 0	76,505 5 8	14,29,545 0 5
160 10 0	19 1 6	170 6 0	26 8 0	521 7 6
160 10 0	19 1 6	170 6 0	25 8 0	521 7 6
.....	.....	.....	.....	.....
7,243 4 4	.....	.....	14 10 5	7,307 14 9
7,243 4 4	.....	.....	14 10 5	7,507 14 9
3,288 6 0	432 0 0	1,049 12 0	328 0 0	13,183 8 6
38 7 0	0 0 0	40 14 0	6 8 0	165 4 0
8,162 13 5	17,619 7 0	10,996 3 4	4,625 12 3	74,879 14 6
2,295 6 3	.....	.....	.....	2,295 6 3
385 8 0	.....	.....	.....	385 8 0
14,170 8 8	18,052 7 0	12,086 13 4	4,960 4 3	90,909 9 3
2,76,565 7 3	59,019 10 6	1,01,817 1 10	81,811 9 11	15,38,277 0 10
-5,446 1 8	*-1,464 7 0*	*-339 13 0*	*-297 12 0*	*-9,445 13 8*
2,71,119 5 7	57,555 3 6	1,01,477 4 10	81,513 13 11	15,21,831 3 2

FORM NO. 68.—*Summary of Revenue and Expenditure*

Budget Head	Direction	Panch Mahals Division	North Thana Division	East Thana Division
EXPENDITURE—10, FOREST	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
B.—CONSERVANCY AND WORKS.				
I.—Timber and other produce removed from the forests by Government Agency—				
a. Timber	.....	234 10 9	586 15 0	599 5 0
b. Firewood and charcoal ...	.....	.....	16 3 0	.....
c. Bamboos	.....	.....	.....	.....
d. Sandalwood	.....	.....	.....	.....
e. Grass and other minor produce.	.....	.....	.....	.....
Total, B—I ...	.....	234 10 9	603 2 0	599 5 0
II.—Timber and other produce removed from the forests by consumers or purchasers.	.....	3,816 11 0	23,606 4 3	10,299 5 9
Deduct.—Establishment charges recoverable from contractors, etc., on account of pay of Depot Officers, etc.	.....	.....	.....	.....
Total, B—II ...	.....	3,816 11 0	23,606 4 3	10,299 5 9
III.—Live stock, Stores, Tools and Plant—				
a. Purchase of cattle	.....	.....	.....	.....
b. Feed and upkeep of cattle ...	.....	.....	.....	4 14 0
c. Purchase of stores, tools and plant.	5 4 0	225 4 0	195 10 6	219 3 0
d. Customs duty	.....	.....	.....	.....
Total, B—III ...	5 4 0	285 4 0	195 10 6	224 0 0
IV.—Communications and Buildings—				
a. Railways and Tramways ...	.....	.....	.....	.....
b. Roads and bridges (other than those in connection with Railways and Tramways).	.....	40 0 0	2,728 7 9	2,448 4 6
c. Buildings	.....	2,558 2 3	6,106 15 5	1,912 5 1
d. Other works	.....	29 15 0	466 9 9	227 1 9
Total, B—IV ...	.....	2,628 1 3	9,302 0 11	4,587 11 4

of the different Divisions for the financial year 1939-40—contd.

West Thana Division	East Nasik Division	West Nasik Division	Surat Sub-Division.	Total for 1939-40
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
410 15 9	.....	424 13 0	10 0 0	2,266 11 6
.....	.....	.....	9 0 0	25 3 0
.....	.....	.....	.....	.....
.....	.....	30 9 9	.....	30 9 9
.....	.....	12 7 0	.....	12 7 0
410 15 9	.....	467 13 9	19 0 0	2,334 15 3
10,672 12 9	1,719 11 3	2,925 5 3	2,910 14 3	55,951 0 6
.....	.....	.....	.....	.....
10,672 12 9	1,719 11 3	2,925 5 3	2,910 14 3	55,951 0 6
.....	.....	.....	.....	.....
.....	.....	.....	.....	4 14 0
350 7 0	99 4 0	150 0 0	115 13 3	1,420 12 9
.....	.....	.....	.....	.....
350 7 0	99 4 0	150 0 0	115 13 3	1,425 10 9
.....	.....	.....	.....	.....
599 15 9	349 7 0	5,881 1 0	424 4 0	12,471 8 0
5,910 12 6	107 4 0	1,061 7 1	2,040 8 6	19,727 5 10
665 6 9	226 0 0	30 0 0	28 12 0	1,673 13 3
7,176 8 0	682 11 0	7,002 8 1	2,493 8 6	33,872 13 1

FORM No. 68.—*Summary of Revenue and Expenditure*

Budget Head	Direction	Panch Mahals Division.	North Thana Division.	East Thana Division
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
EXPENDITURE—10. FOREST				
B.—CONSERVANCY AND WORKS—*contd.*				
V.—*Organisation, improvement and extension of forests*—				
a. Demarcation	.....	1,084 6 0	500 8 0	568 9 9
b. Forest Settlement	.....	.....	.....	.....
c. Surveys	.....	.....	.....	.....
d. Working Plans	.....	.....	.....	.....
e. Plantations	.....	46 8 0	.....	.....
f. Reproduction	.....	2,717 4 9	9,284 8 1	3,741 2 0
g. Fire protection	.....	2,177 10 6	2,026 11 3	1,968 0 3
h. Other works	.....	9 12 0	1,243 8 0	18 12 0
Total, B—V ...	.....	5,976 9 3	13,055 1 4	6,296 8 0
VI.—*Miscellaneous*—				
a. Rent of leased forests and payments to shareholders in forests managed by Government.	.....	.....	.....	521 2 0
b. Law charges	.....	.....	.....	.....
c. Grain compensation allowance.	.....	.....	.....	.....
d. Clothing	.....	776 3 9	2,627 3 9	1,251 10 0
e. Famine fodder charges ...	.....	10 0 0	.....	.....
f. Other charges	.....	214 3 0	76 13 0	73 11 0
Total, B—VI ...	.....	1,000 6 9	2,704 0 9	1,846 7 0
VII.—*Suspense*—				
a. Work advances	.....	.....	.....	.....
Total, B—VII ...	.....	.....	.....	.....
VIII.—*Demarcation of boundaries (between British territory and Indian States).*	.....	.....	20 0 0	18 4 0
Total, B—VIII ...	.....	.....	20 0 0	18 4 0
Total B-Conservancy and Works ...	5 4 0	13,941 11 0	49,486 3 9	23,671 9 1

of the different Divisions for the financial year 1939-40—contd.

West Thana Division	East Nasik Division	West Nasik Division	Surat Sub-Division	Total for 1939-40
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
160 0 0	302 12 9	302 12 9	97 3 6	3,046 2 9
28 8 0	.....	.....	.....	28 8 0
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	909 6 6	"	.....	955 14 6
5,714 0 3	1,161 18 6	1,403 11 3	1,031 6 0	25,073 13 10
1,198 0 9	298 12 0	133 2 6	2,807 1 6	10,614 6 9
.....	161 1 0	47 15 0	.....	1,472 0 0
7,090 4 0	2,858 13 9	1,082 9 6	3,935 11 0	41,190 8 10
.....	.....	.....	.....	5:1 2 0
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
2,719 3 9	965 0 6	1,577 7 3	618 12 6	10,535 8 6
.....	.....	.....	.....	10 0 0
56 11 6	0 5 0	147 15 0	0 3 6	579 14 0
9,785 14 3	965 5 6	1,725 6 3	619 0 0	11,646 8 6
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	14 4 0	3 12 0	56 4 0
.....	.....	14 4 0	3 12 0	56 4 0
25,486 8 9	6,320 18 6	14,267 14 10	10,097 11 0	1,46,477 11 11

FORM No. 68.—*Summary of Revenue and Expenditure*

Budget Head	Direction	Panch Mahals Division	North Thana Division	East Thana Division
EXPENDITURE—10. FOREST—*contd.*	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
C.—ESTABLISHMENTS				
A.—GENERAL DIRECTION				
I.—Pay of Officers—				
a. Chief Conservators or Conservators.	25,800 0 0	.....	.....	.....
b. Superior officers *plus* personal and special pay—				
Charged	.....	.....	12,917 12 0	.....
Voted	.....	5,954 15 0	2,266 7 0	7,305 3 0
c. Leave salary—				
Charged	.....	.....	464 12 0	.....
Voted	.....	.....	1,089 18 0	.....
Total, C.—I ... Charged ...	25,800 0 0	.....	13,382 8 0	.....
Total, C.—I ... Voted ...	.....	5,954 15 0	3,356 4 0	7,305 3 0
II.—Pay of Establishment—				
a. Subordinate forest and depôt establishment *plus* personal and special pay.	.....	33,919 2 0	57,074 14 0	61,428 2 0
b. Office establishment *plus* personal and special pay.	2,393 6 0	1,393 1 0	10,495 15 0	9,209 13 0
c. Proficiency allowance ...	.....	.....	.....	.....
d. Temporary establishment *plus* special pay.	.....	455 2 0	1,656 7 0	3,126 12 0
e. Leave salary ...	1,684 0 0	6,325 0 0	4,276 6 0	5,984 5 0
Total, C.—II ...	11,082 6 0	53,122 5 0	73,503 10 0	79,749 0 0
III.—Allowances, Honoraria, etc.—				
a. Compensatory allowances—				
Charged	.....	.....	.....	.....
Voted	.....	.....	.....	153 0 0
b. Travelling allowance—				
Charged	2,151 10 0	.....	1,823 15 0	.....
Voted	786 15 0	9,307 6 0	10,545 10 0	13,050 6 0
c. Plague allowance ...	.....	.....	.....	.....
d. House-rent allowance—				
Charged	.....	.....	.....	.....
Voted	.....	.....	.....	.....
e. Forest training	.....	.....	.....	.....
f. Grain compensation ...	.....	.....	.....	.....
g. Cost of passages granted under the Superior Civil Service Rules, 1924—				
Charged	.....	.....	.....	.....
h. Payments on account medical treatment on British officers of the Superior Civil Service.				
Total, C.—III ... Charged ...	2,151 10 0	.....	1,828 15 0	.....
Total, C.—III ... Voted ...	786 15 0	9,307 6 0	10,545 10 0	13,203 6 0
IV.—Contingencies—				
a. Stationery ...	11 12 6	289 5 0	388 6 6	346 10 0
b. Carriage of tents and records ...	462 14 6	170 11 2	549 5 6	212 4 0
c. Rents, rates and taxes ...	190 12 0	120 12 0	23 2 0	97 8 0
d. Service postage and telegram charges.	975 1 6	1,699 12 0	2,201 4 6	1,800 9 0
e. Sundries ...	442 12 6	518 3 0	653 0 0	388 9 6
Total, C.—IV ...	2,103 5 0	2,798 11 2	3,815 2 6	2,845 8 6
TOTAL, C.—ESTABLISHMENTS Charged ...	27,951 10 0	.....	15,211 7 0	.....
TOTAL, C.—ESTABLISHMENTS Voted ...	13,972 10 0	71,183 5 2	91,220 10 6	1,03,103 1 6
GRAND TOTAL OF ALL EXPENDITURE UNDER 10 FOREST ...	41,929 8 8	85,125 0 2	1,55,918 5 3	1,26,974 10 7
Surplus or deficit	−39,654 4 0	+93,330 2 6	+4,17,360 8 4	+1,39,161 6 7

of the different Divisions for the financial year 1939-40—contd.

West Thana Division	East Nasik Division	West Nasik Division	Surat Sub-Division.	Total for 1939-40
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	.....	.....	25,800 0 0
.....	.....	13,400 0 0	.....	26,317 12 0
8,269 0 0	7,783 4 0	.....	5,837 11 0	37,416 8 0
.....	.....	.....	.....	464 12 0
.....	.....	.....	1,303 4 0	2,393 1 0
.....	.....	13,400 0 0	.....	52,582 8 0
8,269 0 0	7,783 4 0	.....	7,140 15 0	39,809 9 0
63,535 2 0	32,709 10 0	45,871 11 0	17,045 6 0	3,16,613 15 0
10,485 1 0	7,520 10 0	9,944 2 0	2,912 13 0	67,359 12 0
.....	.....	.....	.....	.....
1,876 0 0	308 11 0	988 13 0	336 0 0	8,747 13 0
6,103 2 0	4,079 7 0	6,072 2 0	1,023 13 0	35,548 3 0
81,999 4 0	44,618 6 0	62,876 12 0	21,318 0 0	4,28,269 11 0
.....	.....	.....	.....	.....
2,041 12 0	.....	16 0 0	.....	2,209 12 0
.....	.....	1,816 0 0	.....	5,796 9 0
12,958 2 0	7,289 0 0	8,193 9 0	3,479 11 0	65,607 11 0
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
589 15 0	.....	.....	.....	589 15 0
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	1,816 0 0	.....	5,796 9 0
15,589 13 0	7,289 0 0	8,205 9 0	3,479 11 0	68,407 6 0
374 4 6	243 3 0	306 12 3	75 11 0	2,036 0 9
277 7 6	268 12 6	312 8 9	271 7 0	2,515 6 11
45 3 2	11 4 0	109 11 0	3 8 0	601 12 2
1,700 0 3	1,300 2 0	1,299 13 6	749 1 6	11,795 12 3
398 15 0	227 13 9	492 15 6	232 10 9	3,355 0 0
2,795 14 5	2,051 8 3	2,531 13 0	1,332 6 3	20,264 0 1
.....	.....	15,916 0 0	.....	58,379 1 0
1,08,653 15 5	61,741 13 3	78,604 2 0	33,271 0 3	5,56,750 10 1
1,37,140 8 2	68,062 10 9	1,03,068 0 10	43,368 11 3	7,61,607 7 0
+1,33,978 13 5	−10,607 7 3	−1,610 12 0	+38,145 2 8	+7,63,293 10 3

FORM No. 68.—*Summary of Revenue and Expenditure*

Budget Head	Direction	East Khandesh Division	West Khandesh Division*
	Rs. a. p.	Rs. a. p.	Rs. a. p.
CENTRAL CIRCLE			
REVENUE			
X.—*Forest*			
I.—Timber and other produce removed from the forest by Government Agency—			
a. Timber ...	.....	136 4 0	359 4 0
b. Firewood and charcoal ...	.....	26 12 0	1,046 12 0
c. Bamboos ...	.....	.....	.....
d. Sandalwood ...	.....	20 8 0	43 8 0
e. Grass and other minor produce.	.....	.....	.....
Total, I ...	.....	193 8 0	1,449 8 0
II.—Timber and other Produce removed from the Forest by Consumers or Purchasers—			
a. Timber ...	.....	17,301 2 0	1,33,589 12 6
b. Firewood and charcoal ...	.....	13,611 4 0	2,543 1 0
c. Bamboos ...	.....	8,513 7 3	1,109 12 0
d. Grazing and fodder grass ...	.....	47,851 9 3	21,391 3 6
e. Other minor produce ...	.....	4,506 8 0	19,043 12 6
f. Other items ...	.....	.....	.....
g. Commutation fees ...	.....	.....	.....
Total, II ...	.....	91,783 14 6	1,80,677 9 6
III.—Drift and waif wood and confiscated Forest Produce ...	.....	278 2 3	199 2 3
Total, III ...	.....	278 2 3	199 2 3
IV.—Revenue from Forest not managed by Government—			
a. Duty on foreign timber and other forest produce ...	.....	3,848 4 0	3,317 0 0
b. Revenue from shared and private forests ...	.....	.....	.....
Total, IV ...	.....	3,848 4 0	3,317 0 0
V.—Miscellaneous—			
a. Fines and forfeitures ...	...	1,427 0 0	2,705 5 0
b. Refunds ...	36 0 0	225 12 6	127 5 6
c. Other sources ...	2,559 6 6	20,730 4 0	61,743 13 11
d. Recoveries of Establishment Charges ...	.....	.....	.....
Total, V ...	2,595 6 6	22,383 0 6	64,576 8 5
VII.—Loss or gain by exchange ...	.....	.....	.....
GROSS TOTAL REVENUE ...	2,595 6 6	1,19,476 13 3	2,50,119 12 2
Deduct—Refunds—G-Fee ...	.....	394 0 0	667 6 0
Deduct—Refunds—Others ...	.....	313 11 0	898 1 0
NET REVENUE ...	2,595 6 6	1,17,769 2 3	2,48,554 5 2
EXPENDITURE 10—FOREST			
B.—CONSERVANCY AND WORK.			
I. Timber and other produce removed from the Forests by Government Agency—			
a. Timber ...	.....	68 7 0	287 11 9
b. Firewood and charcoal ...	.....	.....	564 8 0
c. Bamboos ...	.....	.....	11 8 0
d. Sandalwood ...	.....	.....	.....
e. Grass and other minor produce.	.....	.....	.....
Total, B—I ...	.....	68 7 0	863 11 9

of the different Divisions for the financial year 1939-40—contd.

Poona Division†	Satara Division	Kolaba Division	Working Plans Division, N. C. and C. C.	Total for the year 1939-40
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
3,068 0 0	338 0 0	6,179 9 0	.....	10,081 1 0
8,584 2 6	2,992 3 0	3,822 0 0	.....	16,471 13 6
.....	.....	.....	.....	.....
228 2 3	34 4 0	0 8 0	.....	326 14 3
.....	.....	.....	.....	.....
11,880 4 9	3,364 7 0	10,002 1 0	.....	26,879 12 9
26,523 4 4	30,298 2 0	1,21,266 3 4	.....	3,38,978 8 2
22,586 8 0	2,790 4 6	8,247 15 0	.....	42,779 0 6
92 4 0	121 15 0	12 0 0	.....	2,349 6 3
33,360 14 3	11,867 4 0	158 4 6	.....	1,07,629 3 6
4,702 12 0	5,151 8 0	2,552 14 0	.....	35,957 6 6
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
77,255 10 7	50,229 1 6	1,32,237 4 10	.....	5,52,193 8 11
91 13 6	76 6 0	680 14 9	.....	1,326 6 9
91 13 6	76 6 0	680 14 9	.....	1,326 6 9
.....	.....	.....	.....	7,065 4 0
.....	31 5 9	33 8 0	.....	64 13 9
.....	31 5 9	33 8 0	.....	7,130 1 9
475 8 0	128 2 0	2,468 4 0	.....	7,199 3 0
800 2 0	69 12 0	172 8 0	103 7 0	1,583 15 9
6,282 14 4	4,450 0 0	11,197 14 8	.....	1,05,964 5 5
274 6 0	.....	2,373 5 0	.....	2,647 11 0
7,832 15 1	4,647 14 0	16,206 15 8	102 7 0	1,18,345 3 2
+0 12 11	.....	.....	.....	0 12 11
97,071 8 10	58,349 2 3	1,50,160 13 3	102 7 0	6,85,875 14 3
207 10 0	1,303 10 0	64 4 0	.....	10,612 15 6
644 3 6	144 2 0	5,976 0 0	.....	
96,219 11 4	56,901 6 3	1,53,120 8 3	102 7 0	6,75,263 14 9
924 13 3	.....	2,030 4 9	.....	3,311 3 9
2,150 14 0	1,303 3 0	640 1 9	.....	4,663 10 9
.....	.....	.....	.....	.....
.....	7 0 0	.....	.....	11 8 0
.....	.....	.....	.....	7 0 0
3,075 10 3	1,315 3 0	2,670 6 6	.....	7,993 6 6

FORM NO. 68.—*Summary of Revenue and Expenditure*

Budget Head	Direction	East Khandesh Division	West Khandesh Division*
EXPENDITURE—*contd.*	Rs. a. p.	Rs. a. p.	Rs. a. p.
B—CONSERVANCY AND WORKS.—*contd.*			
II.—Timber and other Produce removed from the Forests by consumers or purchasers ...	.....	3,105 13 0	8,249 6 6
Total, B—II ...	.....	3,105 13 0	8,249 6 6
III.—Live-stock, stores, tools and plant—			
a. Purchase of stores, tools and plant ...	.....	354 2 6	449 10 0
Total, B—III ...	.....	354 2 6	449 10 0
IV.—Communications and Buildings—			
b. Roads and bridges (other than those in connection with Railways and Tramways) ..	.....	5,271 8 3	5,858 2 9
c. Buildings ...	...	707 13 6	2,552 14 0
d. Other works ...	.....	173 13 3	347 10 6
Total, B—IV ...	.....	6,153 2 6	8,758 11 3
V.—Organization, improvement and extension of Forests—			
a. Demarcation ...	.....	86 15 0	100 5 0
b. Forest Settlement ...	.....	.....	.....
c. Surveys ...	.....	.....	.....
d. Working Plans ...	.....	.....	.....
e. Plantations ...	.....	.....	904 5 6
f. Reproduction ...	.....	709 11 9	1,517 13 1
g. Fire protection ...	.....	873 10 0	4,893 7 11
h. Other works ...	.....	1,310 0 0	1,131 14 9
Total, B—V ...	.....	2,980 4 9	8,547 14 8
VI.—Miscellaneous—			
a. Rent of leased forests and payments to shareholders in forests managed by Government ...	.....	.....	.....
b. Law charges ..	.....	.....	0 2 8
c. Grain Compensation allowance ...	.....	.....	.....
d. Clothing ...	.....	1,346 12 0	1,452 14 3
e. Famine Fodder charges ...	.....	10 10 0	.....
f. Other charges ...	.....	.....	44 10 0
Total, B—VI ...	.....	1,357 6 0	1,497 10 6
VII—Suspense—			
a. Works advances ...	.....	.....	.....
Total, B—VII ...	.....	.....	.....
VIII.—Demarcation of boundries (between British territory and Indian States). ...	.....	.....	.....
Total, B—CONSERVANCY AND WORKS ...	.....	14,019 8 9	28,407 0 8
C.—ESTABLISHMENTS			
I.—Pay of Officers—			
a. Conservators (Charged) ...	22,528 10 0	.....	.....
b. Superior Officers plus Personal and special pay. (Charged ...	98 4 0	.....	9,195 10 0
(Voted ...	.....	5,027 2 0	4,370 15 0
c. Leave Salary ... (Charged ...	.....	.....	96 2 0
(Voted ...	.....	.....	.....
Total, I ... (Charged ...	22,626 14 0	.....	9,291 12 0
(Voted ...	.....	5,027 2 0	4,370 15 0

of the different Divisions for the financial year 1939-40—contd.

Poona Division†	Satara Division	Kolaba Division	Working Plans Division, N. C. and C. C.	Total for the year 1938-39
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
339 13 9	400 0 0	1,841 10 9	512 12 3	14,449 8 3
339 13 9	400 0 0	1,841 10 9	512 12 3	14,449 8 3
110 14 0	150 0 0	266 14 6	34 8 0	1,366 1 0
110 14 0	150 0 0	266 14 6	34 8 0	1,366 1 0
.....	15 0 0	79 12 0	.....	11,224 7 0
378 11 9	406 10 0	1,990 4 6	.....	6,076 5 3
.....	5 0 0	.....	.....	526 7 9
378 11 9	426 10 0	2,070 0 6	.....	17,827 4 0
200 1 0	149 11 0	27 15 0	.....	564 15 0
29,984 2 3	.....	.....	.....	29,984 2 3
.....	.....	.....	.....	.....
.....	.....	.....	139 7 0	139 7 0
1,162 13 0	576 0 0	.....	.....	2,643 2 6
744 13 8	416 7 6	1,531 15 0	.....	4,950 12 7
.....	257 12 0	57 0 0	.....	6,081 13 11
.....	95 0 0	957 0 0	.....	3,493 14 9
32,091 13 6	1,523 14 6	2,573 14 0	139 7 0	47,857 4 0
607 14 6	3,724 1 9	9,337 10 10	.....	13,669 10 4
.....	.....	.....	.....	0 2 3
.....	.....	.....	.....	.....
1,553 0 3	981 14 9	1,989 4 0	36 0 9	7,359 14 0
.....	.....	.....	.....	10 10 0
30 8 0	44 8 0	189 6 0	20 14 0	329 14 0
2,191 6 9	4,750 7 9	11,516 4 10	56 14 9	21,370 2 7
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
35 0 0	.....	.....	.....	35 0 0
38,223 6 0	8,566 3 3	20,939 3 1	743 10 0	1,10,898 10 4
.....	.....	.....	.....	22,598 10 0
.....	.....	.....	.....	9,203 14 0
7,422 11 0	3,744 11 0	11,475 0 0	8,132 15 0	40,173 6 0
.....	.....	.....	.....	16 2 0
20 7 0	.....	.....	.....	20 7 0
.....	.....	.....	.....	31,918 10 0
7,443 2 0	3,744 11 0	11,475 0 0	8,132 15 0	40 193 13 0

FORM NO. 68.—*Summary of Revenue and Expenditure*

Budget Head	Direction	East Khandesh Division	West Khandesh Division*
EXPENDITURE—*concld.*	Rs. a. p.	Rs. a. p.	Rs. a. p.
C.—ESTABLISHMENTS—*concld.*			
II.—Pay of Establishment—			
a. Subordinate Forest and Depôt Establishment *plus* special and personal pay ...	.....	59,163 10 0	69,483 12 0
b. Office Establishment *plus* special and personal pay ...	10,535 11 0	11,647 11 0	15,094 15 0
d. Temporary Establishment *plus* special pay ...	201 2 0	.....	955 15 0
e. Leave Salary ...	1,629 11 0	6,652 2 0	8,532 10 0
Total, II ...	12,366 8 0	77,463 7 0	94,067 4 0
III.—Allowances, Honoraria, etc.—			
a. Compensatory Allowances. { Charged ...	.....	.....	.....
{ Voted ...	.....	.....	.....
b. Travelling allowance. { Charged ..	2,446 15 0	.....	941 15 0
{ Voted ...	948 0 0	12,794 5 0	15,464 3 0
d. House-rent allowance. { Charged ...	.....	.....	.....
{ Voted	.....	.....	.....
g. Cost of passages granted under the Superior Service Rules, 1924 -(Charged) ...	.....	.....	1,003 2 0
Total, C.—III ... { Charged ...	2,446 15 0	.....	1,945 1 0
{ Voted ...	948 0 0	12,794 5 0	15,464 3 0
IV.—Contingencies—			
a. Stationery ..	6 13 0	270 13 0	367 13 0
b. Carriage of tents and records...	218 0 0	204 10 0	196 7 0
c. Rents, rates and taxes ...	32 0 0	101 8 0	413 11 6
d. Service postage and telegram charges ...	974 3 6	2,200 10 9	2,725 4 0
e. Sundries ...	505 5 6	641 13 0	752 11 6
Total, C.—IV ...	1,726 6 0	3,419 5 9	4,455 15 0
V.—Establishment charges recoverable from other Governments, Departments, etc.—			R. D. 3,000 0 0 Ex. 9,000 0 0
(*a Deduct* Amount recoverable from Raisinpur Estate on account of pay of Ranger, etc.	.....	.....	1,472 2 0
Total, V ...	... ..	... .	—13,472 2 0
TOTAL C ESTABLISHMENTS ...	40,114 11 0	98,704 8 9	1,16,123 0 0
Total, 10, Forest ..	40,114 11 0	1,13,723 7 6	1,44,530 0 8
Surplus or Deficit ...	—37,519 4 6	+5,045 10 9	+1,04,024 4 11

of the different Divisions for the financial year 1939-40—contd.

Poona Division†	Satara Division	Kolaba Division	Working Plans Division, N. C. & C. C.	Total for the year 1938-39
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
46,062 13 0	31,014 5 0	64,262 0 0	5,644 8 0	2,75,631 0 0
11,101 12 0	7,963 8 0	12,277 2 0	2,358 15 0	70,979 10 0
234-2 0	.....	478 12 0	740 8 0	2,610 7 0
4,187 12 0	3,976 6 0	5,836 9 0	1,914 4 0	32,729 6 0
61,586 7 0	42,954 3 0	82,854 7 0	10,658 3 0	3,81,950 7 0
.....	.....	.....	.....	.....
.....	694 12 0	171 10 0	.....	856 6 0
.....	.....	.....	.....	3,348 14 0
9,192 13 0	6,911 3 0	14,005 3 0	4,276 1 0	63,591 12 0
.....	.....	.....	.....	.....
.....	166 5 0	.....	.....	166 5 0
.....	.....	.....	.....	1,003 2 0
.....	.....	.....	.....	4,392 0 0
9,192 13 0	7,772 4 0	14,176 13 0	4,276 1 0	64,624 7 0
206 5 0	182 6 0	305 12 0	4 3 0	1,344 0 0
810 12 0	97 6 0	274 3 0	340 2 9	1,529 8 9
75 13 0	32 7 0	115 2 0	32 0 0	805 9 6
1,488 4 0	1,300 2 0	1,375 14 0	300 0 6	10,314 6 9
346 12 6	152 10 9	156 15 3	213 9 3	2,769 13 9
2,280 14 6	1,764 15 9	2,225 14 3	889 15 6	16,763 6 9
				-12,000 0 0
.....	.....	.....	.....	-1,472 2 0
.....	.....	.....	.....	-13,472 2 0
80,503 4 6	56,236 1 9	1,10,733 2 3	23,937 2 6	5,26,370 9 9
1,18,726 10 6	64,892 5 0	1,31,671 5 4	24,700 12 6	6,37,269 4 1
-22,506 15 2	-7,900 14 9	+21,449 9 11	-24,598 5 6	+37,903 10 8

FORM NO. 68.—*Summary of Revenue and Expenditure*

Budget Head	Direction	Kanara Northern Division	Kanara Eastern Division
SOUTHERN CIRCLE	Rs. a. p.	Rs. a. p.	Rs. a. p.
REVENUE—X, FOREST			
I.—Timber and other produce removed from the forests by Government Agency—			
a. Timber ...	.....	6,35,208 8 8	2,929 12 0
b. Firewood and Charcoal ...	.....	1 11 0	.....
c. Bamboos ...	.....	.....	2 8 0
d. Sandalwood ...	.....	1,264 14 0	6,336 3 4
e. Grass and other minor produce ...	.....	.....	.....
Total, I ...	.....	6,36,475 1 8	9,268 7 4
II. Timber and other produce removed from the forests by consumers or purchasers—			
a. Timber ...	.....	1,92,117 6 5	1,69,021 1 2
b. Firewood and charcoal ...	.....	5,721 5 8	1,005 9 5
c. Bamboos ...	.....	35,051 14 6	5,768 14 6
d. Grazing and fodder grass ...	.....	.....	4 8 0
e. Other minor produce ...	.....	1,059 10 7	4,243 9 4
f. Other items ...	.....	.....	.....
g. Commutation fees ...	.....	.....	.....
Total, II ...	.....	2,33,950 5 2	1,80,042 10 5
III.—Drift and waif wood and confiscated forest produce ...	.....	.....	.....
Total, III ...	.....	.....	.....
IV.—Revenue from forests not managed by Government—			
a. Duty on foreign timber and other forest produce ...	.....	.....	.....
b. Revenue from shared and private forests ...	.....	.....	.....
Total, IV ...	.....	.....	.....
V.—Miscellaneous—			
a. Fines and forfeitures ...	.....	27 14 9	289 15 5
b. Refunds ...	.....	53 3 0	104 11 0
c. Other sources ...	3,569 2 6	32,130 8 6	1,679 8 5
d. Recoveries of Establishment charges ...	.....	.....	.....
e. Contribution towards leave salary and passage of Officers lent to foreign service ...	.....	.....	.....
Total, V ...	3,569 2 6	32,211 10 3	2,074 2 10
Grand Total, Revenue ...	3,569 2 6	9,02,637 1 1	1,91,385 4 7
Deduct Refunds Ordinary ...	180 0 0	27 0 0	19 8 0
Grazing fees ...	.....	1 12 0	0 4 0
Net Revenue ...	3,389 2 6	9,02,608 5 1	1,91,365 8 7
EXPENDITURE—10, FOREST			
B—CONSERVANCY AND WORKS.			
I.—Timber and other produce removed from the forests by Government Agency—			
a. Timber ...	.....	1,90,918 1 2	8,837 7 6
b. Firewood and charcoal ...	.....	57 12 0	.....
c. Bamboos ...	.....	.....	.....
d. Sandalwood ...	.....	233 0 6	1,151 13 6
e. Grass and other minor produce ...	.....	.....	.....
Total, B-I ...	.....	1,91,238 13 8	9,989 5 0

of the different Divisions for the financial year 1939-40—contd.

Kanara Western Division	Belgaum Division	Dharwar-Bijapur Division	Working Plans Division, S. C.	Total for the year 1939-40
Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.
40 596 14 9	4,718 0 0	486 4 0	.....	6,83,939 7 5
.....	.....	33 4 0	.....	34 15 0
.....	.....	17 0 0	.....	19 8 0
6 13 6	19,464 1 0	83,186 13 5	.....	1,10,257 12 1
.....	.....	.....	.....	.....
40,602 12 3	24,182 1 0	83,723 4 3	.....	7,94,251 10 6
74,320 10 6	59,395 1 10	19,137 8 10	.....	5,13,991 12 9
61,685 8 8	65,477 9 0	58,978 6 8	.....	1,92,569 7 5
1,243 7 0	14,782 0 0	7,486 12 0	.....	64,023 0 0
55 13 0	299 12 0	518 15 9	.....	878 15 9
1,221 12 0	12,535 13 6	7,141 15 0	.....	26,201 12 5
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
1,38,508 2 2	1,52,500 4 4	92,963 10 3	.....	7,97,965 0 4
16 11 0	.....	.....	.....	16 11 0
16 11 0	...	.....	.....	16 11 0
.....	.....	.....	.....	.....
.....	.....	10 0 0	.....	10 0 0
.....	.....	10 0 0	.....	10 0 0
118 15 3	199 8 0	218 13 0	.....	855 2 5
5 0 0	54 0 0	590 12 8	0 10 0	803 4 8
3,052 2 2	10,527 14 11	3,592 5 9	.....	54,551 10 3
.....	.....	.....	.....	.....
.....	4 4 0	372 0 0	.....	376 4 0
3,176 1 5	10,785 10 11	4,773 15 5	0 10 0	56,591 5 4
1,82,363 10 10	1,87,468 0 3	1,81,470 13 11	0 10 0	16,48,834 11 2
39 9 4	627 3 0	1,690 1 2	.....	2,583 5 6
.....	.....	25 4 0	.....	27 4 0
1,82,264 1 6	1,86,840 13 3	1,79,755 8 9	0 10 0	16,46,224 1 8
24,741 5 5	840 8 6	596 15 0	.....	2,.5,964 5 7
.....	.....	29 13 0	.....	87 9 0
.....	.....	.....	.....	.....
18 14 0	3,527 11 0	11,213 8 0	.....	16,141 15 0
1,879 13 6	.....	.....	.....	1,879 13 6
26,640 0 11	4,368 3 6	11,840 4 0	.....	2,44,076 11 1

FORM No. 68.—*Summary of Revenue and Expenditure*

Budget Head	Direction	Kanara Northern Division	Kanara Eastern Division
EXPENDITURE—*contd.*	Rs. a. p.	Rs. a. p.	Rs. a. p.
B.—CONSERVANCY AND WORKS—*contd.*			
II.—Timber and other produce removed from the forests by consumers or purchasers ...	.....	656 4 0	735 14 0
Total, B-II ...	.....	656 4 0	735 14 0
III.—Live Stock, Stores, Tools and Plant—			
a. Purchase of cattle ...	.....	.....	.....
b. Feed and upkeep of cattle ...	.....	50 0 0	.....
c. Purchase of stores, tools and plant ...	0 6 0	1,972 1 9	387 13 0
d. Custom Duty ...	.....	.....	.....
Total, B-III ...	0 6 0	2,022 1 9	387 13 0
IV.—Communications and Buildings—			
a. Railways and Tramways ...	.....	25,196 14 0	.....
b. Roads and bridges (other than those in connection with Railways and Tramways) ...	.....	15,529 2 6	5,556 11 4
c. Buildings ...	.....	2,073 4 8	2,610 10 1
d. Other works ...	.....	2,767 1 11	148 13 0
Total, B-IV ...	.....	45,566 7 1	8,316 2 5
V.—Organization, Improvement and Extension of Forests—			
a. Demarcation ...	.....	50 0 0	101 15 0
b Forest Settlement ...	.....	.....	.....
c. Surveys ...	.....	.....	.....
d. Working Plans ...	.....	.....	.....
e. Plantations ...	.....	.....	.....
f. Reproduction ...	49 15 0	12,746 9 9	11,661 1 0
g. Fire protection ...	.....	4,012 4 0	3,996 13 6
h. Other works ...	.....	229 14 0	195 8 6
Total B-V ...	49 15 0	17,038 11 0	15,955 5 6
VI.—Miscellaneous—			
a. Rent of leased forests and payments to shareholders in forests managed by Government ...	.....	.....	.....
b. Law charges ...	.....	.....	.....
c. Grain compensation allowance ...	.....	.....	.....
d. Clothing ...	.....	2,453 11 6	961 12 3
e. Famine fodder charges ...	.....	.....	.....
f. Other charges ...	.....	281 4 5	201 12 0
Total, B-VI ...	.....	2,738 15 11	1,163 8 3
VII.—Suspense—			
a. Work advances ...	.....	.....	.....
Total, B-VII ...	.....	.....	.....
VIII. Demarcation of boundaries (between British territory and Indian States) ...	.....	60 0 0	151 0 0
Total, B-Conservancy and Works ...	50 6 0	2,59,316 6 2	36,699 0 2
C.—ESTABLISHMENTS			
I.—Pay of Officers—			
a. Conservators	23,015 12 0	.....	.....
b. Superior Officers *plus* personal and special pay	Charged	10,086 11 0	5,613 9 0
	Voted	3,628 10 0	12,527 5 0
c. Leave Salary ...	Charged ... 1,618 9 0	.....	.....
	Voted	526 15 0	.....
Total, I ...	Charged ... 24,634 5 0	10,086 11 0	5,613 9 0
	Voted	4,155 9 0	12,527 5 0

of the different Divisions for the financial year 1939-40—contd.

Kanara Western Division	Belgaum Division	Dharwar-Bijapur Division	Working Plans Division S. C.	Total for the year 1939-40
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
568 10 10	784 15 4	343 9 0	.....	3,089 5 2
568 10 10	784 15 4	343 9 0	.....	3,089 5 2
.....	.....	.....	.....	.....
.....	.....	.....	.....	50 0 0
266 9 7	125 12 0	461 5 0	31 7 0	3,245 6 4
.....	.....	.....	.....	.....
266 9 7	125 12 0	461 5 0	31 7 0	3,296 6 4
.....	.....	.....	.....	25,196 14 0
5,602 9 11	326 1 5	3,437 5 0	.....	30,451 14 2
1,495 15 10	950 5 6	1,406 6 2	.....	8,536 10 3
353 12 0	120 3 0	50 15 0	.....	3,440 12 11
7,452 5 9	1,396 9 11	4,894 10 2	.....	67,626 3 4
326 1 2	238 12 0	112 11 6	.....	829 7 8
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	4,992 4 0	4,992 4 0
.....	.....	40 0 0	.....	40 0 0
6,619 0 3	2,141 10 0	771 1 6	.....	34,299 5 6
945 14 0	1,534 13 0	551 11 0	.....	10,041 7 6
9 12 0	.....	244 2 0	.....	679 4 0
7,500 11 5	4,215 3 0	1,719 10 0	4,992 4 0	51,471 12 8
..				
.....	.....	60 0 0	.....	60 0 0
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
1,059 9 0	1,557 2 0	1,225 0 9	10 9 6	7,216 13 6
.....	.....	.....	.....	.....
464 1 1	1,147 15 0	42 8 0	444 15 0	2,582 7 6
1,523 10 1	2,685 1 0	1,317 8 9	455 8 6	9,849 4 6
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
99 13 0	40 0 0	.....	.....	350 13 0
44,051 13 7	13,585 12 9	20,676 14 11	5,479 3 6	3,79,759 8 1
.....	.....	.....	.....	23,015 12 0
3,601 10 0	.....	10,611 5 0	15,529 0 0	45,442 3 2
3,647 2 0	.....	3,784 15 0	.....	23,588 0 0
.....	.....	1,240 12 0	.....	2,759 5 0
.....	.....	.....	.....	526 15 0
3,601 10 0	.....	11,852 1 0	15,529 0 0	71,217 4 0
3,647 2 0	.....	3,784 15 0	.....	21,214 15 2

FORM NO. 68.—*Summary of Revenue and Expenditure*

Budget Head	Direction	Kanara Northern Division	Kanara Eastern Division
	Rs. a. p.	Rs. a. p.	Rs. a. p.
EXPENDITURE—*concld.*			
C.—ESTABLISHMENTS—*contd.*			
II.—Pay of Establishment—			
a. Subordinate Forest and Depôt Establishments *plus* personal and special pay ...	636 3 0	67,487 7 0	49,281 12 0
b. Office Establishments *plus* personal and special pay ...	12,843 11 0	14,021 2 0	12,674 7 0
c. Proficiency allowance ...	116 14 0	.....	.....
d. Temporary Establishment *plus* special pay ...	43 14 0	609 12 0	467 6 0
e. Leave Salary ...	620 14 0	6,597 2 0	3,554 9 0
Total, II ..	14,261 8 0	88,715 7 0	65,978 2 0
III.—Allowances, Honoraria, etc.—			
a. Compensatory allowances. { Charged ...	.....	.....	.....
{ Voted ...	.....	250 0 0	.....
b. Travelling allowance. { Charged ...	2,145 7 0	1,401 13 0	668 13 0
{ Voted ...	756 13 0	11,957 6 0	10,799 15 0
c. Plague allowance	.....	.....	.....
d. House rent allowance ...	.....	.....	.....
e. Forest Training ...	.....	.....	.....
f. Grain compensation ...	.....	.....	.....
g. Cost of passages granted under the Superior Service Rules, 1924—Charged	1,862 11 0	706 11 0	.....
h. Payments on account of Medical treatment of British Officers of the "Superior Civil service" ...	.....	.....	.....
Total, III ... { Charged ...	4,008 2 0	2,108 8 0	668 13 0
{ Voted ...	756 13 0	12,207 6 0	10,799 15 0
IV.—Contingencies—			
a. Stationery ...	19 2 0	374 9 0	237 0 0
b. Carriage of tents and records ...	187 14 0	86 0 0	708 15 6
c. Rents, rates and taxes ...	1,080 0 0	21 0 0	5 13 9
d. Service postage and telegram charges ...	1,242 4 0	1,751 10 0	1,780 0 0
e. Sundries ...	449 4 6	438 9 0	373 0 0
Total, IV ...	2,097 8 6	2,671 12 0	2,593 13 3
V—ESTABLISHMENT CHARGES RECOVERABLE FROM OTHER GOVERNMENTS DEPARTMENTS, ETC.—			
Deduct—			
a. Establishment charges payable to Central Government ...	.....	.....	.....
Deduct—establishment charges recoverable from contractors, etc. on account of pay of guards, etc..	.....	.....	.....
Total, V ...	.....	.....	.....
TOTAL, C—ESTABLISHMENTS ...	46,568 4 6	1,19,945 5 0	98,181 9 3
F.—LOSS OR GAIN BY EXCHANGE ...	.....	.....	.....
TOTAL 10, FOREST ...	46,608 9 6	3,79,261 11 2	1,34,880 9 5
SURPLUS OR DEFICIT ...	−43,219 7 0	+5,23,346 9 11	+56,434 15 2

of the different Divisions for the financial year 1939-40—contd.

Kanara Western Division	Belgaum Division	Dharwar-Bijapur Division	Working Plans Division S. C.	Total for the year 1939-40
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
61,735 4 0	55,345 10 0	50,323 9 0	3,405 8 0	2,68,215 0 0
14,318 12 0	10,213 15 0	10,567 14 0	1,343 0 0	75,993 13 0
.....	120 0 0	.....	.....	235 14 0
956 11 0	85 3 0	321 12 0	474 10 0	2,859 4 0
6,246 0 0	3,033 1 0	4,991 9 0	174 12 0	26,116 15 0
83,256 11 0	69,697 13 0	66,104 12 0	5,397 9 0	3,93,410 14 0
.....	.....	.....	.....	.....
.....	11 0 0	53 13 0	.....	314 13 0
360 3 0	91 14 0	1,708 11 0	1,777 7 0	8,154 4 0
10,602 10 0	6,900 8 0	8,671 10 0	1,528 6 0	51,217 4 0
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	2,569 6 0
.....	.....	.....	.....	.....
360 3 0	91 14 0	1,708 11 0	1,777 7 0	10,723 10 0
10,602 10 0	6,911 8 0	8,725 7 0	1,528 6 0	51,532 1 0
345 15 0	270 9 0	311 2 0	5 13 0	1,563 2 0
176 11 0	176 9 0	132 5 0	308 2 0	1,265 8 6
76 7 6	.....	362 6 0	.....	1,545 11 3
1,699 4 0	918 4 0	2,117 10 9	150 0 0	9,659 0 9
362 14 6	507 5 6	630 3 0	87 14 0	2,868 2 6
2,661 4 0	1,871 11 6	3,553 10 9	551 13 0	16,901 9 0
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
1,04,128 8 0	78,572 14 6	95,729 8 9	24,784 3 0	5,67,900 5 0
.....	.....	.....	.....	.....
1,48,180 5 7	92,158 11 3	1,16,306 7 8	30,263 6 6	9,47,659 13 1
+34,083 11 11	+94,682 2 0	+63,449 1 1	−30,262 12 6	+6,98,564 4 7

FORM No. 68.—*Summary of Revenue and Expenditure of the*

Budget Head.	Forest Engineering Division.	Utilization Division.
	Rs. a. p.	Rs. a. p.
REVENUE—10, FOREST.		
I.—Timber and other produce removed from the forest by Government Agency—		
a. Timber	231 0 0	.....
b. Firewood and charcoal	.....	.....
c. Bamboos	.....	.....
d. Sandalwood	.....	.....
e. Grass and other minor produce	.....	.....
Total, I ...	231 0 0	.....
II.—Timber and other produce removed from the forest by consumers or purchasers—		
a. Timber	.....	.....
b. Firewood and charcoal	.....	.....
c. Bamboos	.....	.....
d. Grazing and fodder grass	.....	.....
e. Other minor produce	.....	.....
f. Other items	.....	.....
g. Commutation fees	.....	.....
Total, II ...	.....	.....
III.—Drift and waif wood and confiscated forest produce ...	.....	.....
Total, III ...	.....	.....
IV.—Revenue from forest not managed by Government—		
a. Duty on foreign timber and other forest produce ...	.....	.....
b. Revenue from shared and private forests	.....	.....
Total, IV ...	.....	.....
V.—Miscellaneous—		
a. Fines and forfeitures	.....	.....
b. Refunds	12 12 0	.....
c. Other sources	111 0 10	.....
d. Recovery of establishment charges	.....	.....
e. Contributions of leave salary of officers on foreign duty ...	.....	.....
Total, V ...	123 12 10	.....
VII Loss or gain by exchange	.....	.....
GRAND TOTAL, REVENUE ...	344 12 10	.....
Deduct—Refunds ...	.....	.....
NET REVENUE ...	344 12 10	.....

different Divisions for the financial year 1939-40—contd.

Silvicultural Division.	General Direction.	Total of all Circles.	Grand total, Province of Bombay.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
5 0 0	.....	6,95,895 2 5	6,96,121 2 5
.....	.....	18,036 3 6	18,036 3 6
.....	.....	42 0 0	42 0 0
.....	.....	1,10,659 10 4	1,10,659 10 4
.....	.....	1,291 8 0	1,291 8 0
5 0 0	.....	8,25,924 8 3	8,26,150 8 3
.....	.....	21,47,252 5 11	21,47,252 5 11
.....	.....	2,61,534 14 5	2,61,534 14 5
.....	.....	89,757 11 3	89,757 11 3
.....	.....	1,62,322 1 3	1,62,322 1 3
.....	.....	98,836 8 10	98,836 8 10
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	27,59,703 9 8	27,59,703 9 8
.....	.....	1,864 9 3	1,864 9 3
.....	.....	1,864 9 3	1,864 9 3
.....	.....	7,055 4 0	7,055 4 0
.....	.....	7,582 12 6	7,582 12 6
.....	.....	14,648 0 6	14,648 0 6
.....	.....	21,237 13 11	21,237 13 11
.....	9 0 0	2,567 8 8	2,529 4 5
.....	1 6 0	2,36,395 14 2	2,36,508 4 0
.....	13,926 7 0	4,943 1 3	18,869 5 3
.....	.....	761 12 0	761 12 0
.....	13,936 12 0	2,65,846 1 9	2,79,906 10 7
.....	.....	*—0 12 11*	*—0 12 11*
5 0 0	13,936 12 0	38,67,987 10 4	38,82,274 8 9
.....	.....	*—21,669 8 8*	*—21,669 8 8*
5 0 0	13,936 12 0	38,46,318 1 8	38,60,604 10 6

FORM NO. 68.—*Summary of Revenue and Expenditure of the*

Budget Head.	Forest Engineering Division.	Utilization Division.
	Rs. a. p.	Rs. a. p.
EXPENDITURE—10, FOREST.		
B.—CONSERVANCY AND WORKS.		
I.—Timber and other produce removed from the forests by Government Agency—		
a. Timber	9,406 7 2	.....
b. Firewood and charcoal	.....	.....
c. Bamboos	.....	.....
d. Sandalwood	.....	.....
e. Grass and other minor produce	.....	.....
Total, B-I ...	9,406 7 2	.....
II.—Timber and other produce removed from the forests by consumers or purchasers	.....	.....
Deduct—Establishment charges recoverable from contractors, etc., on account of pay of Depôt-officers, etc.	.....	.....
Total, B-II ...	.....	.....
III.—Live-stock, store, tools and plant—		
a. Purchase of cattle	.....	.....
b. Feed and upkeep of cattle	.....	.....
c. Purchase of stores, tools and plant	305 11 0	70 6 0
d. Customs duty	.....	.....
Total, B-III ...	305 11 0	70 6 0
IV.—Communications and Buildings—		
a. Railways and Tramways	.....	.....
b. Roads and bridges (other than those in connection with Railways and Tramways)	25 4 0	.....
c. Buildings	18 0 0	.....
d. Other works	1 8 0	.....
Total, B-IV ...	44 12 0	.....
V.—Organization, improvement and extension of forests—		
a. Demarcation	.....	.....
b. Forest Settlement	.....	.....
c. Surveys	.....	.....
d. Working Plans	.....	.....
e. Plantations	.....	.....
f. Reproduction	.....	.....
g. Fire protection	.....	.....
h. Other works	.....	.....
Total, B-V ...	.....	.....

different Divisions for the financial year 1939-40—contd.

Silvicultural Division.	General Direction.	Total of all Circles.	Grand total, Province of Bombay.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	2,31,542 4 10	2,40,948 12 0
.....	.....	4,776 6 9	4,776 6 9
.....	.....	11 8 0	11 8 0
.....	.....	16,182 8 9	16,182 8 9
.....	.....	1,892 4 6	1,892 4 6
.....	.....	2,54,405 0 10	2,63,811 8 0
.....	.....	73,489 13 11	73,489 13 11
.....	.....	.....	.....
.....	.....	73,489 13 11	73,489 13 11
.....	.....	.....	.....
.....	.....	54 14 0	54 14 0
670 7 9	.....	6,032 4 1	7,078 12 10
.....	.....	.....	.....
670 7 9	.....	6,087 2 1	7,133 10 10
.....	.....	25,196 14 0	25,196 14 0
.....	.....	54,147 13 2	54,173 1 2
.....	.....	34,340 6 4	34,358 6 4
.....	.....	5,641 1 11	5,642 9 11
.....	.....	1,19,326 3 5	1,19,370 15 5
.....	.....	4,440 9 5	4,440 9 5
.....	.....	30,012 5 3	30,012 5 3
.....	.....	.....	.....
.....	.....	5,131 11 0	5,131 11 0
.....	.....	3,638 1 0	3,638 1 0
.....	.....	64,313 15 11	64,313 15 11
.....	.....	27,337 12 2	27,337 12 2
.....	.....	5,645 2 9	5,645 2 9
.....	.....	1,40,519 9 6	1,40,519 9 6

FORM No. 68.—*Summary of Revenue and Expenditure of the*

Budget Head	Forest Engineering Division.	Utilization Division.
EXPENDITURE—10, FOREST—*contd.*	Rs. a. p.	Rs. a. p.
B.—CONSERVANCY AND WORKS—*contd.*		
VI.—Miscellaneous—		
a. Rent of leased forests and payments to shareholders in forests managed by Government	.....	.....
b. Law charges	.....	.....
c. Grain Compensation allowance	.....	.....
d. Clothing	30 6 3	.....
e. Famine Fodder charges	.....	.....
f. Other charges	158 15 0	.....
Total, B-VI ...	189 5 3	.....
VII.—Suspense—		
a. Work advances	.....	.....
Total, B-VII ...	.....	.....
	.....	.....
VIII—Demarcation of boundaries (between British territory and Indian States).	.....	.....
TOTAL, B—CONSERVANCY AND WORKS ...	9,946 8 5	70 6 0
C—ESTABLISHMENTS.		
A—GENERAL DIRECTION.		
I.—Pay of Officers—		
a. Chief Conservator or Conservators	.....	.....
b. Superior Officers *plus* Personal and special pay. Charged ...	16,200 0 0	.....
Voted ...	.....	2,225 13 0
Personal Assistant to the Chief Conservator *plus* special pay ... ... (voted) ...	.....	.....
c. Leave Salary ... ... Charged ...	.....	.....
Voted ...	.....	.....
Total, I ... Charged ...	16,200 0 0	.....
Voted ...	.....	2,225 13 0
II.—Pay of Establishment—		
a. Subordinate Forest and Depôt Establishment *plus* special and personal pay	2,493 10 0	283 5 0
b. Office Establishment *plus* special and personal pay ...	.....	407 2 0
a. Office Establishment	.....	.....
c. / *b.* Proficiency allowance	.....	.....
d. / *c.* Temporary Establishment *plus* special pay	10,013 8 0	154 4 0
e. / *d.* Leave Salary	449 12 0	.....
Total, II ...	12,955 14 0	844 11 0

different Divisions for the financial year 1939-40—contd.

Silvicultural Division.	General Direction.	Total of all Circles.	Grand total, Province of Bombay.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	14,240 12 4	14,240 12 4
.....	.....	0 2 3	0 2 3
.....	.....	.....	.....
-0 12 0	0 6 0	25,112 3 6	25,142 3 6
.....	.....	20 10 0	20 10 0
121 15 0	180 0 0	3,492 3 6	3,953 1 6
121 3 0	180 6 0	42,865 15 7	43,356 13 10
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	442 1 0	442 1 0
791 10 9	180 6 0	6,37,135 14 4	6,48,124 8 6
.....	33,000 0 0	71,344 6 0	1,04,344 6 0
6,620 4 0	.....	81,053 13 0	1,03,874 1 0
.....	.....	1,01,177 14 0	1,03,403 11 0
.....	7,048 5 0	.....	7,048 5 0
-601 11 0	.....	3,320 3 0	2,718 8 0
.....	6,418 14 0	2,940 7 0	9,359 5 0
6,018 9 0	33,000 0 0	1,55,718 6 0	2,10,936 15 0
.....	13,467 8 0	1,04,118 5 0	1,19,811 5 0
239 10 0	.....	8,80,469 15 0	8,83,475 8 0
496 11 0	.....	2,14,322 3 0	2,15,226 0 0
.....	12,338 3 0	.....	12,338 3 0
.....	.....	236 14 0	236 14 0
114 0 0	.....	14,217 8 0	24,499 4 0
.....	2,904 8 0	94,394 8 0	97,748 12 0
850 5 0	15,242 11 0	12,03,631 0 0	12,33,524 9 0

FORM No. 68.—*Summary of Revenue and Expenditure of the*

Budget Head.		Forest Engineering Division.	Utilization Division.
EXPENDITURE—10, FOREST—*contd.*		Rs. a. p.	Rs. a. p.
C—ESTABLISHMENTS. A—GENERAL DIRECTION—*contd.*			
III.—Allowances, Honoraria, etc.—			
a. Compensatory Allowances	Charged ...	.....	.....
	Voted ...	.....	103 4 0
b. Travelling Allowance	Charged ...	1,974 0 0	.....
	Voted ...	1,956 11 0	1,587 2 0
c. Plague Allowance (Voted)		.....	.....
d. — House-rent allowance ... ... *e.*	Charged ...	.....	.....
	Voted ...	.....	.....
e. — Forest training ... ... *d.*		.....	.....
f. Grain compensation		.....	.....
g. — Cost of Passages granted under the Superior Services Rules, 1924 (Charged)		.....	.....
e. Do. do. (Charged)			
h — Payment on account of Medical treatment of British Officers of the "Superior Civil Service" ... ... *f*		.....	.....
Total, III ...	Charged ...	1,974 0 0	.....
	Voted ...	1,956 0 0	1,690 6 0
IV.—Contingencies—			
a. Stationery		11 2 0	1 1 0
b. Carriage of tents and records		283 1 0	13 5 0
Other Non-contract contingencies		.....	.....
c. Rents, rates and taxes		50 0 0	.....
d. Service postage and telegram charges ... ... *a.*		236 12 6	80 0 6
e. Sundries		118 7 0	72 5 6
Total, IV ...		699 6 6	166 12 0

different Divisions for the financial year 1939-40—contd.

Silvicultural Division.	General Direction.	Total of all Circles.	Grand total, Province of Bombay.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	.....	.....
.....	.....	3,390 15 0	3,494 3 0
545 15 0	3,783 8 0	17,339 11 0	23,643 9 0
318 9 0	2,248 12 0	1,80,416 11 0	1,86,527 13 0
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	166 5 0	166 5 0
.....	377 6 0	589 15 0	967 5 0
.....	.....	.....	.....
.....	865 15 1	3,572 8 0	4,438 7 1
.....	.....	.....	.....
545 15 0	4,649 7 1	20,912 3 0	28,081 9 1
318 9 0	2,626 2 0	1,84,563 14 0	1,91,155 10 0
2 6 0	.....	4,943 2 9	4,957 12 9
129 7 0	.....	5,340 8 2	5,766 5 2
.....	1,104 14 5	.....	1,104 14 5
.....	.....	2,963 0 11	3,003 0 11
75 0 0	.....	31,699 3 9	32,091 0 9
86 14 3	948 1 6	8,993 0 3	10,218 12 6
293 11 3	2,053 15 11	53,939 15 10	57,141 13 6

FORM No. 68.—*Summary of Revenue and Expenditure of the*

Budget Head	Forest Engineering Division	Utilization Division.
EXPENDITURE—*contd.*	Rs. a. p.	Rs. a. p.
V.—*Establishment charges recoverable from other Governments, Departments, etc.*—		
Deduct amount recoverable from the Excise and Revenue Department for Excise and Revenue Administration ...	.....	.....
a { *Deduct* amount recoverable from Raisingpur Estate on account of pay of Rangers, etc.	.....	.....
a { Establishment charges payable to Central Government ...	.....	.....
Share of Establishment charges transferred from 10—Agriculture	.....	.....
Total, V ...	.....	.....
TOTAL { C—ESTABLISHMENTS ...	33,785 15 6	4,927 10 0
TOTAL { A—GENERAL DIRECTION...	.....	.....
D.—Interest on Capital (Charged)	.....	.....
E.—Charges in England—		
a. *Leave salaries and Deputation pay*—		
(i) Expenditure of the High Commissioner for India ...	.....	.....
b. *Sterling Overseas pay*—		
(i) Expenditure of the High Commissioner for India ...	.....	.....
Total, E ...	.....	.....
F.—Loss or gain by exchange	.....	.....
Total 10. FOREST ...	43,733 1 11	4,998 0 0
GRAND TOTAL OF ALL EXPENDITURE ...	43,733 2 11	4,998 0 0
Surplus or deficit ...	−43,387 6 1	−4,998 0 0

different Divisions for the financial year 1939-40—concld.

Silvicultural Division,	General Direction	Total of all Circles	Grand total, Province of Bombay
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
.....	.....	—12,000 0 0	—12,000 0
.....	.....	—1,472 2 0	—1,472 2 0
.....	6,020 0 0	.....	6,020 0 0
.....	13,355 10 3	.....	13,355 10 3
.....	19,375 10 3	—13,472 2 0	5,903 8 3
8,027 1 8	.....	17,09,400 9 10	17,56,141 4 7
.....	90,414 1 3	.....	
.....	33,338 0 0	.....	33,338 0 0
.....	74,207 15 1	.....	74,207 15 1
.....	27,190 5 2	.....	27,190 5 2
.....	1,01,398 4 3	.....	1,01,398 4 3
.....	449 8 10	.....	449 8 10
8,818 12 0	2,25,780 4 4	23,46,536 8 2	26,99,665 11 5
8,818 12 0	2,25,780 4 4	23,46,536 8 2	26,99,665 11 5
—8,818 12 0	—2,11,843 8 4	14,99,781 9 6	12,80,736 15 1

FORM No. 69.—*Revenue received and*

Division	Particulars	Outstandings at commencement of year	Value of Sales and other Revenue during year
1	2	3	4
NORTHERN CIRCLE		Rs. a. p.	Rs. a. p.
Direction ...	Timber and other forest produce.	.....	2,275 4 0
Panch Mahals ...	Do. ...	7,770 3 6	1,82,746 8 3
North Thana ...	Do. ...	1,042 0 0	5,82,423 14 1
East do. ...	Do. ...	17,513 7 0	2,75,027 9 11
West do. ...	Do. ...	6,491 2 0	2,79,655 15 3
East Nasik ...	Do. ...	8,969 2 0	65,559 9 6
West do. ...	Do. ...	4,013 15 7	1,02,098 4 11
Surat Sub-Division ...	Do. ...	1,929 0 0	79,938 5 11
	Total, Northern Circle...	47,728 14 1	15,50,925 8 1
CENTRAL CIRCLE			
East Khandesh ...	Timber and other produce and revenue from various sources.	1,080 0 0	1,19,329 13 3
West do. ...	Do. ...	3,585 1 0	2,48,258 9 2
Poona ...	Do. ...	1,742 0 6	96,445 3 0
Kolaba ...	Do. ...	4,381 0 0	1,55,151 6 3
Satara ...	Do. ...	6,027 4 0	58,349 2 3
Working Plans ...	Do. ...	.....	102 7 0
Direction ...	Do. ...	.....	2,565 6 6
	Total, Central Circle...	16,815 5 6	6,80,231 15 5
SOUTHERN CIRCLE			
Direction ...	Various sources ...	.....	3,569 2 6
Kanara, N. D. ...	Various sources, timber and other forest produce.	1,54,063 0 3	8,67,715 4 10
„ E. D. ...	Do. ...	18,682 11 9	1,90,788 6 4
„ W. D. ...	Do. ...	19,765 14 9	2,00,041 8 9
Belgaum Division ...	Do. ...	3,830 4 0	1,56,445 0 2
Dharwar-Bijapur ...	Do. ...	4,297 7 9	1,80,765 12 2
Working Plans, Southern Circle.	Various sources ...	.....	0 10 0
	Total, Southern Circle ...	2,00,639 6 6	16,38,325 12 9
	Grand Total, Province of Bombay.	2,65,183 10 1	38,79,482 4 3

Outstandings on account of Revenue during 1939-40.

Total	Amount realized during year	Balance due to the Department at end of year	Remarks
5	6	7	8
Rs. a. p.	Rs. a. p.	Rs. a. p.	
2,276 4 0	2,276 4 0	.....	
	1,78,366 2 8		
1,90,616 11 9	(a) 168 6 0	11,305 10 1	(a) Refunds.
	(b) 662 9 0		(b) Written off under proper authority.
	(c) 35 0 0		
	5,73,278 13 7		
6,83,465 14 1	(a) 502 2 0	9,684 14 6	(c) Deleted due to cancellation of sales, remission of fines, etc.
	2,59,156 1 2		
	(a) 237 6 0		
2,09,541 0 11	(b) 2,646 12 6	30,585 18 8	
	(c) 15 0 0		
	2,71,110 5 7		
	(a) 5,446 1 8		
2,86,347 1 8	(b) 1,935 0 0	8,083 10 0	
	(c) 488 0 0		
	57,655 3 6		
	(a) 1,464 7 0		
64,598 11 9	(b) 11 6 0	5,153 6 8	
	(c) 344 5 0		
	1,01,477 4 10		
	(a) 339 13 0		
1,06,119 4 6	(b) 6 2 0	4,246 5 11	
	(c) 43 10 9		
	81,513 13 11		
81,867 5 11	(a) 297 12 0	55 12 0	
	15,24,881 1 3		
	(a) 8,446 15 8		
16,07,654 6 2	(b) 4,351 13 6	69,094 8 0	
	(c) 920 15 9		
	1,17,769 2 3		(a) Refunds.
1,20,409 13 3	(a) 707 11 0	1,933 0 0	(b) Written off.
	2,48,554 5 2		(c) Sales cancelled.
	(a) 1,565 7 0		
2,51,843 10 2	(b) 56 0 0	1,369 14 0	
	(c) 309 0 0		
	96,219 11 4		
98,187 3 6	(a) 851 18 6	1,115 10 8	
	1,53,120 8 3		
1,53,632 6 3	(a) 6,040 4 0	871 10 0	
	56,901 6 3		
64,376 6 3	(a) 1,447 13 0	6,027 4 0	
102 7 0	102 7 0	.....	
2,595 6 6	2,595 6 6	.....	
	6,75,262 14 9		
	(a) 10,612 15 6		
6,97,047 4 11	(b & c) 364 0 0	10,807 6 8	
	3,359 2 6		(a) Refunds.
3,569 2 6	(a) 180 0 0	.....	(b) Errors corrected.
	9,02,609 5 1		(c) Written off under proper
10,21,778 5 1	(d) 28 12 0	1,19,141 4 0	authority.
	1,91,365 8 7		
	(a) 10 12 0		
2,18,475 2 1	(b) 166 13 8	26,918 15 10	
	1,62,264 1 6		
	(a) 39 9 4		
2,19,807 7 6	(b) 342 12 0	87,154 13 8	
	(c) 6 4 0		
	1,86,840 13 3		
	(a) 627 3 0		
1,90,275 4 2	(b) 37 4 0	2,769 15 11	
	1,70,755 8 9		
	(a) 1,715 5 2		
1,85,053 3 11	(b) 167 12 0	3,413 10 0	
	(c) 11 0 0		
0 10 0	0 10 0	.....	
	16,64,224 1 8		
	(a) 2,610 9 6		
18,38,065 8 3	(b) 714 9 8	1,89,398 10 6	
	(c) 17 4 0		
	38,46,318 1 8		
	(a) 21,669 8 8		
41,49,066 14 4	(b) 5,192 7 2	2,69,300 9 1	
	(c) 1,246 8 0		

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Forest Administration Report of the Province of Bombay

For the Year 1939-40

Part I

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FOREST ADMINISTRATION REPORT OF THE PROVINCE OF BOMBAY FOR THE YEAR 1939-40.

CHAPTER I.

CONSTITUTION OF STATE FORESTS.

(1) Alteration in Areas.

Afforestations and disforestments during the year resulted in a net reduction of 3 square miles in the reserved forests in charge of the Forest Department and 14 square miles in the forests in charge of the Revenue Department. The areas at the end of the year stood at 10,566 and 1,617 square miles respectively. Similarly, the protected forests in charge of the Revenue Department decreased by 16 square miles to 594 square miles, those in charge of the Forest Department remaining unaltered at 160 square miles.

The disforestments were chiefly in favour of cultivation in Thana, West Khandesh, Poona, Belgaum and Dharwar-Bijapur. Inspite of these large areas given out for cultivation, the hunger for land for this purpose is on the increase particularly in the Panch Mahals and Khandesh Divisions and the Gokak and Gujnal ranges of the Belgaum division where much land cannot usually be given unless the areas more suitable for growing timber and fuel and for grazing are reduced considerably causing thereby other grievances.

Besides these, territorial changes occurred in the Central and Southern Circles. In the former, consequent on the formation of an independent Sub-Division in West Khandesh, the Shirpur ranges which were transferred to East Khandesh on the abolition of the North Khandesh Division were added to the West Khandesh Division and the Chalisgaon range was retransferred to the East Khandesh Division. Similarly, the Supa range, which formed part of the Kanara Northern Division, was transferred to the Belgaum Division.

(2) Forest Settlements.

The total area of reserved forest pending settlement at the commencement of the year was 1 square mile and 471 acres to which 1 square mile and 243 acres were added during the year. Out of this area only 239 acres were finally settled, the cost on this account being Rs. 28.

As stated in the last year's report the work of acquiring first class survey numbers within the forest demarcation line in the Satara Sub-Division has been held in abeyance, while in the Poona Division, an area of 786 acres and 15 gunthas was acquired during the year at a cost of Rs. 29,984.

(3) Demarcation.

One mile of new boundaries was demarcated artificially in the Southern Circle at a cost of Rs. 10 and 22,089 miles of existing boundaries (including those between British territory and Goa, Mysore and Bhor) were repaired at a cost of Rs. 4,872.

The boundary between British territory and the Baroda State was finally settled. The cleared fire line in Deomogra has been fixed as the inter-state boundary and an area of about 50 acres has been ceded to the Baroda State by way of compensation for the land included in British territory as a result of the readjustment.

(4) Forest Surveys.

An area of 5·64 square miles in the Satara Sub-Division and 109·49 square miles in the Belgaum Division was resurveyed by the Survey of India Department during the year. The actual survey work done last year in the Dharwar-Bijapur Division was. 141 square miles including the 2 square miles shown in the last year's report. These details were received late after the submission of the report and therefore could not be included in it.

The total expenditure on the constitution of State forests during the year was Rs. 34,866.

CHAPTER II.

MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

Preparation and Control of Working Plans.

(a) Preparation of Working Plans.

Efficient management of forests is achieved only when exploitation, conservation and regeneration go hand in hand and to this end exploitation, regeneration and conservation are attempted by means of working plans.

The progress made in the preparation of working plans during the year is summarised below :—

(1) The revised working plan for the Panch Mahals forests was sanctioned by Government.

(2) The working plan for the Thana Gurcharans has been submitted to Government.

(3) As stated in the last year's report the provisions of Part II of the South Tapti Working Plan for the West Khandesh forests are being followed. The operation of Part III of the plan has however been suspended pending the result of the experiments in rotational grazing

being tried in the area. It has been decided to try three different systems of rotational grazing for a period of five years and to modify the plan in the light of the experience gained at the end of that period.

(4) The enumeration of sandal in the Belgaum Division was continued and completed over an area of about 56 square miles. Similarly the enumeration of sandal in the Sirsi-Siddapur range was continued, the area examined being a little over 75 square miles.

(5) A complete revision of the working plans for Peint in West Nasik and the Taloda forests in West Khandesh was considered unnecessary by the Chief Conservator, and orders were issued for effecting the necessary changes by means of correction slips.

(6) The revision of the working plans for the Igatpuri forests in Nasik and the Khandesh Satpuda forests is still under consideration.

(7) Little progress with the other working plans in hand in the Southern Circle could be made owing to the amalgamation of the Working Plans and Belgaum Divisions. A full time Divisional Forest Officer, Working Plans, must be appointed as soon as a suitable officer is available.

(8) The preliminary report on the revision of the working plan for the Tulshi forests, in which it is proposed to include the Vihar lake forests has been submitted by the Divisional Forest Officer, Working Plans, Northern and Central Circles, to the Conservator of Forests, Northern Circle.

(9) The reallocation of coupes of the revised working plan for the Thana forests has been entrusted to the Divisional Forest Officer, Working Plans, Northern and Central Circles. He commenced this work in March 1940 and inspected the forests of Bassein, West Vada, Mandvi (Thana) and Bhiwandi ranges of the West Thana Division.

(10) No work was done in connection with the following working plans in the Northern Circle which were stated to need revision in last year's report :—

(*a*) The working plan for the Mandvi forests (Surat District).

and

(*b*) The working plan for the Bulsar and Chikhali including Baragaon Dangs.

Control.

The prescriptions of all working plans were adhered to in essential details, unavoidable deviations being regularised with the sanction of competent authorities. Several coupes, however, remained unsold owing to lack of demand, poor quality of tree-growth, inaccessibility or long lead.

In the Kolaba Division the casuarina coupe of the year was again not clear-felled due to extensive erosion. Selected trees were however sold as fishing stakes from Akshi coupes Nos. 13, 14 and 15 and Varsoli plantation. These brought in a revenue of Rs. 903.

The coupes of the North Kanara Coast Fuel Working Plan in Kanara Western Division were left unexploited in accordance with Government orders as they formed part of minor forests open to the exercise of privileges by the public.

2. Communications and Buildings.

(a) *Roads and Bridges.*

In order to obtain good prices for timber and other forest produce by providing extraction facilities to contractors the Department has constructed and maintained a large number of roads and cart-tracks, etc. 2 Miles of road in the Southern Circle and 18 miles of cart-tracks in the Central Circle were newly constructed during the year. A bridge on the Katur-Bomanhalli road in Eastern Division, Kanara, begun last year, was completed during the year. A culvert on the Bhagwati-Potoli road in Northern Division, Kanara and another on the Kadra-Shivpur road in Western Division, Kanara, were reconstructed. The total cost on new works was Rs. 4,690 as against Rs. 2,095 of the previous year. 1,176 miles of roads and 147 miles of cart-tracks and bridle paths were repaired at a cost of Rs. 49,493, while Rs. 25,197 were paid to the M. & S. M. Railway for the maintenance of the Alnawar-Dandeli forest railway. The corresponding figures of the previous year were respectively Rs. 43,820 and Rs. 43,277.

The construction of the Ozar-Saiwan, Khardi-Parali (Tembha-Parali section) and Washala-Dolkhamb roads and repairs to Hatgad-Wani road, all in the Northern Circle, still await allotment of funds.

The Kasa-Udhwa road in the Northern Circle was transferred to the Public Works Department under Government orders as it forms part of the Bombay-Ahmedabad road.

(b) *Buildings.*

The total expenditure on the construction of new buildings in all the circles was Rs. 17,899 (Rs. 33,698 last year) and on repairs to existing buildings Rs. 16,460 (Rs. 15,790 in the previous year).

In the Northern Circle in order to expedite housing accommodation for subordinates cheaper types of quarters are being constructed—some with wattle and daub walls and others with "brick-nogging". The latter are dearer than the former but even so their cost is only about $\frac{1}{3}$ of the standard masonry designs. These buildings, it is expected, will last at least 50 years.

(c) *Miscellaneous (other works).*

Works under this head usually consist of wells and fencing of compounds, and maintenance of the telephone line in Northern Division, Kanara. The total expenditure on new works and repairs was Rs. 2,087 and Rs. 3,556 respectively. The corresponding figures for the previous year were respectively Rs. 2,595 and Rs. 3,517.

3. Protection of Forests.

(a) *General Protection.*

The following table compares the number of forest offences during the year with those of the previous year and the average of the past 3 years :—

Class of offence.	1939–40.				Total for 1938–39.	Average for 1936–37 to 1938–39.
	Northern Circle.	Central Circle.	Southern Circle.	Total.		
I. Injury to forest by fire.	874	661	195	1,730	2,144	1,720
II. Unauthorised felling or removal of forest produce ..	7,384	6,234	1,534	15,152	12,334	12,312
III. Unauthorised grazing ..	3,282	2,224	405	5,911	4,960	5,250
IV. Other offences ..	1,714	1,207	400	3,321	2,647	2,652
Total, 1939–40 ..	13,254	10,326	2,534	26,114	..	..
Total, 1938–39 ..	10,031	9,745	2,309	..	22,085	..
Average 1936–37 to 1938–39 ..	9,849	9,623	2,462	..	..	21,934

The foregoing statement shows that the number of offences during the year has increased as compared with that of the previous year and the average for the past three years. This increase is mainly due to the fact that the partial failure of the monsoon in 1939 compelled a large section of the local people to eke out a living from the forests.

The various causes for the increase or decrease under each class of offences are discussed below :—

Injury by Fire and Protection from Fire.

There has been a drop of 414 cases (2,144—1,730) and 80,647 (392,884—312,237) acres in the area burnt during the year as compared with the previous year, due mainly to the extensive and intensive precautionary measures taken, partial failure of the monsoon causing poorer growth of grass, which was eaten by cattle thus removing inflammable material, vigilant and successful attempts made by the subordinates to bring the fires under control, propaganda work carried out among the villagers, warnings issued to the people both prior to and during the fire seasons and rewards given last year for good fire protection.

About 528 acres of plantations were burnt in Eastern Division, Kanara. Similarly about 163 acres of old plantations in Northern Division, Kanara were burnt but there was practically no damage.

The system sanctioned by Government of rewarding the villagers who assist the Forest Department in fire protection was brought into force during the year, and in the Northern Circle tokens in the shape of turbans and clothing for children instead of cash were distributed in almost all the divisions. This form of reward seems to give special satisfaction and is considered most suitable as the little money spent in this manner goes a long way to make the children learn to appreciate the benefit of fire protection from their childhood and their parents also take pleasure in seeing their children receiving the gifts.

Unauthorised Felling and Removal of Forest Produce.

There was on the whole an increase by 2,818 cases (15,152—12,334) over last year. This is contributed by all the circles, the Northern Circle alone being responsible for an increase of 2,183 cases. The reason for this large increase is attributed by the Conservator to the partial failure of the monsoon during the year which compelled a large section of the people to eke out a living from the forests by illicitly felling trees and selling fuel. The general increase in breaches of the law is attributable in some degree to the liberalisation of privileges and concessions. Larger numbers of people visit the forests and through ignorance or indifference commit acts which in law are offences.

Two boats were again hired during the year for detective patrol work in the Bassein Creek of the West Thana division and Vaitarna Creek in North Thana. This had a salutary effect in preventing to a great extent the illicit hacking and looting of the forests along the creeks.

Unauthorised Grazing and Protection from Cattle.

The offences under this head show an increase of 951 cases (5,911—4,960) over last year. Of these, the Northern Circle contributed 880. The increase is chiefly due to the scarcity of fodder in the Panch Mahals, Thana and East Khandesh districts.

The areas open and closed to grazing were as follows :—

	Sq. Miles.	Percentage.
Closed to all animals for the whole year	1,018	7·9
Closed to all animals part of the year	253	1·9
Open to all animals except browsers for the whole year ..	9,323	72·1
Open to all animals except browsers for part of the year.	66	0·1
Open to all animals for the whole year	2,275	17·6
Total ..	12,935*	100·0

*Excludes 2 sq. miles submerged in the Bhandardara lake.

The area open to grazing for horned cattle throughout the year was 89·7 per cent. The reduction in the period of closure from 10 to 5 years in the three Thana and Panch Mahals divisions was continued. Similarly more closed areas were opened to grazing in Kanara in compliance with Government orders reducing closure of all areas under regeneration including teak plantations to 5 years.

In other parts closure was relaxed where necessary for special reasons.

The total number of cattle admitted to graze was 1,833,115 as compared with 1,925,978 in the previous year and 2,084,171 the average of the past 3 years. The decrease in the number of cattle is more apparent than real. That grazing is being availed of by a larger number of cattle there can be no doubt. Free grazing has encouraged the influx of cattle from several non-forest villages which in former years abstained from visiting forest areas to avoid paying fees. Free grazing passes according to the rules in force must be obtained in respect of all cattle taken to graze in open forests, but this rule is not always observed and forest subordinates do not always check the number of cattle grazing in open areas. They content themselves in protecting plantations and newly exploited coupes against cattle trespass. Fear of being accused of harassment and the consequent ordeal of inquiry against them deters some subordinates from interrogating herdsmen with cattle encountered in open areas.

The total grazing fees collected during the year amounted to Rs. 11,478. The fees are now restricted to cattle belonging to Indian States and other Provinces only.

The total number of cattle impounded during the year was 76,662 as compared with 76,688 last year.

Other Offences.

There was an increase on the whole of 674 (3,321—2,647) cases and all the Circles are responsible for the increase, the Northern Circle quota being 445. Majority of the cases under this head usually consist of breaches of transit rules, encroachments and illicit shikar etc. and no reasons can be ascribed for variations in such cases.

Out of 293 cases (189 new and 104 old) taken to court 188 cases were decided. Of these 164 were decided in favour of the department and 24 against, the percentage of successful cases being 87·2.

During the year 21,666 cases were disposed of. Of these 20,831 were compounded, the amount of compensation recovered therefor being Rs. 66,672 or Rs. 3·2 per case as against Rs. 3·9 in the previous year. In 835 cases the offenders were let off with a warning and 4.014 cases remained undetected.

Protection against injuries from Natural Causes.

(1) *Creeper and climbers.*—Creepers and climbers were cut as usual by subordinates both in the Northern and Southern Circles, contractors' agency being used wherever possible. In the North and East Thana divisions, the damage done by climbers is extremely serious and an intensive campaign of climber cutting is considered most essential even by employing outside agency to supplement the efforts of subordinates, when funds are available.

(2) *Loranthus.*—This pest was mostly confined to the southern part of Kanara, Western Division and it was kept under control by removal or burning the affected parts of the trees.

(3) The prickly pear, which was destroyed by means of the cochineal insect, is reported to be again appearing in some parts of the Gokak range in the Belgaum Division.

Animal Pest.

Rats, hares, porcupine, monkeys, *cheetal* and *sambhar* caused as usual a certain amount of damage to young teak plantations in both the Northern and Southern Circles. In addition to these, elephants, bison and wild pig in the Southern Circle did some damage.

In the Mandvi range and Bulsar round of the Surat district monkeys damaged plantation and coppice growth rather more than usual. The plantation in the Mandvi range which was destroyed wholesale last year failed to recover due to their constant raids in spite of efforts made to scare them away. In the Bulsar round porcupines entirely destroyed nursery rabs with the result that it will be difficult to find the required number of teak stumps for plantation in the current coupes.

In the Southern Circle lizard and porcupine considerably damaged the seeds and seedlings in teak nurseries in the Gund range of Kanara Northern Division as a result of which shortage of stumps for 1940 is felt. Some plantations in Kanara Western Division suffered very badly from porcupine attack and attempts to kill this pest by poisoning with potatoes treated with arsenic were not successful. The ravages of this animal were checked to some extent by night patrol by guards and Rs. 10 were also paid as reward for killing 10 porcupine.

Insect Pest.

Defoliators did some damage in all the Circles.

About 90 per cent. of plants in about 7 acres of the Nagzari plantation in Kanara Northern Division were badly attacked by shoot borers, specimens of which have been collected and are being sent to the Forest Entomologist, Dehra Dun, for identification and advice.

The damage from Revlook cricket (*Brachytrypes achatinus*) was noticed this year also in the casuarina plantations of Karwar and Honawar ranges of Kanara Western Division. The insect disappeared with the fall of heavy rain.

As stated in the last year's report the insectary for carrying on entomological observations in respect of teak defoliators which had done considerable damage to a young plantation in 1937–38 was opened at Palghar on 1st May 1939 and was operated by Mr. B. M. Bhatia of the Research Institute, Dehra Dun, with one field assistant and other staff. Mr. Bhatia visited various forests (including Gurcharans and Malki) of the North Thana Division and collected specimens of the defoliators for rearing in the insectary. The insectary was closed on 7th October 1939. A note on the observations made has been issued by the President, Forest Research Institute. The cost incurred on this account was Rs. 1,218-8-0.

Frost and Erosion.

There was little damage by frost during the year.

An area measuring 17 acres and 8 gunthas of casuarina coupes at Akshi in the Kolaba Division was washed away during the year under report.

CHAPTER III.

SILVICULTURE.

1. System of Management.

The area in charge of the Forest Department aggregates 10,726 square miles of which 7,563 square miles are organized under various silvicultural systems as detailed below :—

Silvicultural system.	Area square miles.	Percentage.
1. Clear felling	2,687	25·05
2. Improvement	619	5·77
3. Coppice with standards	1,053	9·82
4. Improvement-cum-clear felling	412	3·84
5. Selection-cum-improvement	616	5·74
6. Selection	265	2·48
7. Uniform	331	3·09
8. Simple coppice	435	4·05
9. Others	1,145	10·67
Total under silvicultural systems ..	7,563	70·51
Protection, grazing and uncontrolled ..	3,163	29·49
Grand Total ..	10,726	100·00

General Progress of Regeneration and Afforestation.

(a) *Mainly Natural.*

The total area under natural regeneration both concentrated and not concentrated was 72,783 acres as against 55,974 acres in the preceding year.

(i) *Concentrated.*

Planting of teak stumps and sowing of teak and injaili (junglewood) species such as *babul* (*Acacia arabica*), *dhawra* (*Anogeissus latifolia*), *tiwas* (*Ougeinia dalbergioides*), *bibla* (*Pterocarpus marsupium*), *ain* (*Terminalia tomentosa*), *shiwan* (*Gmelina arborea*), *khair* (*Acacia catechu*), mango (*Mangifera indica*), sandal (*Santalum album*), *kashid* (*Cassia siamea*), *nim* (*Azadirachta indica*), *anjan* (*Hardwickia binata*), *kindal* (*Terminalia paniculata*), *jamba* (*Xylia xylocarpa*), *sagadi* (*Schleichera trijuga*), etc., suitable for the locality were carried out throughout the Province on rab patches, kiln sites, etc., in exploited coupes. The results of these operations were on the whole satisfactory.

Agri-silvicultural System.

In addition to the planting of stumps and sowing of seed of various species, plantations were also raised by the agri-silvicultural system. In the East Nasik Division a further area of 523 acres and 28 gunthas was given out, bringing the total area under this system to 4,339 acres and 28 gunthas. The total number of plot-holders increased to 754 from 663 in the previous year. In the West Khandesh Division the results of raising plantations of *khair* (*Acacia catechu*), *nim* (*Azadirachta indica*), *babul* (*Acacia arabica*), *mohwa* (*Bassia latifolia*) and *chinch* (*Tamarindus indica*) under this system were better, while in the Mahableshwar and Dhebewadi ranges of the Satara sub-division the results were far from satisfactory due to drought in the former range and negligence on the part of the plot-holders in the latter range. As this system of raising plantations in comparatively arid areas in East Nasik and West Khandesh was found suitable, attempts were made to introduce it in other divisions, e.g., East Thana and West Nasik. In the former 10 acres at Yeur were given out after some difficulty. The results were encouraging and the villagers were agreeably surprised at the extraordinarily good crop of *nagli* (Indian millets) they got in the freshly cut area. The results of re-stocking open areas by this system in Belu forests of the West Nasik division were fairly good. The species sown in this area were *khair* (*Acacia catechu*), *kashid* (*Cassia siamea*), sandal (*Santalum album*), and *nim* (*Azadirachta indica*).

(ii) *Not concentrated.*

The results of sowing up open areas with a variety of species, according to the soil factors of the locality selected, were fairly satisfactory.

Agri-silvicultural plot at Nandgaon, East Nasik Division. Soil very poor, rainfall scanty. Regenerated in the monsoon of 1937. Left row—*neem (Azadirachta indica)*; right row—*babul (Acacia arabica)*; with an admixture of *khair (Acacia catechu)* and *anjan (Hardwickia binata)* on both sides.

Photo taken on 6th December 1939 when the plants were 2½ years old.

[Photo by H. W. Starte, Conservator].

(b) Mainly Artificial.

Natural regeneration was supplemented by artificial regeneration wherever necessary.

No artificial regeneration in coupe No. 2 of Casuarina Felling Series I and coupes 6 and 12 of Felling Series II in the Northern Circle could be undertaken because there were not sufficient seedlings for transplanting in the former case while the area of the latter was applied for by the villagers of Shirgaon for grazing their cattle. As the question of disforesting this area has been negatived and a nursery has been raised in the Vevji Depôt compound both these areas will be taken in hand in 1940-41.

In the Central Circle 12 acres of exploited coupe in the East Khandesh Division and 272 acres in the Poona Division were regenerated with *babul* (*Acacia arabica*) with satisfactory results.

The areas regenerated with teak (*Tectona grandis*) on an intensive scale in the three Kanara Divisions are as follows :—

Working-plan.	Area planted.	Spacing.	Cost.
	Acres.		Rs.
(1) Bhagwati High Forest Working Plan ..	108	9′ × 9′	3,992
(2) Supa High Forest Working Plan	156	9′ × 9′ and 6′ × 6′ ..	5,337
(3) Gund Working Plan ..	63	9′ × 9′	1,950
(4) Revised Working Plan for the Yellapur-Mundgod Teak High Forests ..	310	6′ × 6′	9,749
(5) Revised Working Plan for the Nirsol Slopes ..	61	12′ × 6′ and 6′ × 6′ ..	1,628
(6) Ramanguli-Ankola High Forest Working Plan ..	150	15′ × 9′, 12′ × 6′ and 6′ × 6′.	809
Total ..	848	Total ..	23,465

Eight months old casuarina (*Casuarina equisetifolia*) plants raised in wet nurseries were transplanted with an espacement of 12′ × 12′ in 66 acres of the revised working plan for the Casuarina plantations in Kanara Western Division. About 14 acres in the Belgaum Division and 184 acres in the Dharwar-Bijapur Division were artificially regenerated, the former with teak (*Tectona grandis*) and the latter partly with teak and partly with sandal (*Santalum album*) and suitable junglewood species.

Afforestation.

The experiments on the lines of the Italian Gradoni system referred to in the last year's report were started during the year. This system consists of making trenches along the contours on hill slopes, bunding the nullahs and heaping the earth taken out from the trenches on the outer side. The object of this experiment is two-fold; to check further erosion and to conserve water in the sub-soil long enough to promote the growth of vegetation. Six different localities were selected for this experiment and the work of contour trenching and bunding done during the year is given below :—

Division.	Name of the locality where the work is done.	Contour trenching R.ft.	Bunding work done R.ft.
East Nasik	(1) Mohodari ..	4,575	1,466
	(2) Bhawada ..	11,322	1,872
West Khandesh	(3) Nagaon Bari	33,279	..
Poona	(4) Bhamburda	6,413	..
	(5) Khed	12,874	..
Satara Sub-Division ..	(6) Chimangaon	13,343	..
	Total ..	81,806	3,338

These areas were all bare hill sides and receive about 20–30 inches of rainfall. The breadth and depth of the trenches vary according to the nature of the soil but usually these are respectively 2′ and 1′. The areas were strictly closed to grazing and a whole-time watchman is engaged at each spot to enforce closure. The result of bunding in Mohodari, it is reported, was so successful that erosion was practically absent during the year. The chief species sown in the trenches and on the slopes of the earth taken out from trenches and heaped on their banks are *nim* (*Azadirachta indica*), *kashid* (*Cassia siamea*), *khair* (*Acacia catechu*), *babul* (*Acacia arabica*), *chinch* (*Tamarindus indica*), *sawar* (*Bombax malabaricum*), *ain* (*Terminalia tomentosa*), *anjan* (*Hardwickia binata*), etc. Owing to the exceptionally poor monsoon in the first year of the experiment, it is not possible to judge the results accurately. Germination was on the whole satisfactory and a very fair percentage of seedlings survived the hot weather. The results in improved growth of grass are definitely apparent in all the localities and the subsequent course of the experiment should prove interesting.

Tree Planting in Forest Areas.

Wide publicity was given to Government orders regarding concessions granted to the public in the matter of the planting of fruit trees in forest areas. Very few enquiries were received. In all 11 *sanads* (agreements) (7 in Kanara Eastern Division and 4 in the Belgaum division involving respectively an area of 14 and 11 acres) were executed. In the East Nasik division of the Northern Circle, some Bhils of Rajmane village of the Malegaon range expressed a desire to do tree-planting in the forests of their village. They were asked to select a place for the purpose but later on they gave up the idea. The chief difficulty in this division is that areas devoid of tree growth in the forests are so far away from watering places that the people think it would be a waste of time and energy to go in for such a concession.

Help rendered by the Forest Department to Associations, Agriculturists and others in Tree-planting.

As part of the propaganda for "rural reconstruction" carried on by the Range Forest Officers, advice was given to the people to plant fruit and other trees in their *malki* lands. Seedlings of various species raised by the forest subordinates in the Dharwar-Bijapur division were distributed to some villagers in Kod and Hangal ranges. The people in the Bijapur district appear to be unwilling to plant trees in their *malki* lands probably because they think that good crops cannot be raised under the shade of trees. Arrangements are being made to establish nurseries to raise seedlings of *cashew* nut (*Anacardium occidentale*), casuarina (*Casuarina equisetifolia*), soapnut (*Sapindus trifoliatus*) and eucalyptus at the headquarters of each range in the coastal talukas of Kanara. Similar nurseries are also being raised in several ranges of the Province. The Range Forest Officer, Manor, has prepared a nursery in the compound of his quarters and raised 50 *nim* (*Azadirachta indica*) plants for supply to villagers for planting in village gaothans.

In the East Nasik division, the manager of Rawalgaon estate was given advice on tree-planting and supplied with seeds of suitable species by the Range Forest Officer, Malegaon.

On the tree-planting day held in August, about 1 lakh of trees were planted in the West Khandesh district and the Revenue Department was supplied with 18 bags of *anjan* (*Hardwickia binata*) seed. In addition, free demonstrations were given in the matter of tree-planting. In the Satara sub-division the 19th August 1939 was observed as arbor day under the auspices of the Village Development Association and seedlings of teak (*Tectona grandis*) and other species were supplied by the Forest Department to villagers who were given demonstrations in tree-planting by the subordinates.

Tending of Growing Stock.

Equally important as the raising of plantations is the work of tending them till they are finally established. The usual cultural operations such as mulching, weeding, clearing, cleaning and cutting of climbers

were carried out by forest subordinates, wherever possible, and by paid labour in some cases.

Thinnings were either carried out by contractors who purchased the trees standing or done departmentally. The cost of departmental works was Rs. 25,663 and the total revenue realised was Rs. 2,08,812. In a few cases where the villagers did the work, they were allowed at their own request to take away the resultant material in return for their labour.

CHAPTER IV.

EXPLOITATION.

(*a*) System of Management.

The various systems of exploitation and the area worked thereunder are given in Chapter III under the caption " Systems of Management."

(1) Major Forest Produce.

Timber, Fuel and Sandalwood.

Timber and fuel were extracted in the Northern Circle solely through the agency of purchasers and in the Central Circle the same agency was employed except that fuel for the Government depots at Mahableshwar and Panchgani was extracted departmentally. In the Southern Circle timber from valuable High Forests was brought to depots for sale either departmentally or through contractors, while wastewood left *in situ* and standing crops in less valuable High Forest compartments and pole and fuel coupes were sold standing to purchasers. Sandalwood was extracted departmentally and brought to Government depots for conversion and sale. Essentially silvicultural operations such as early thinnings were carried out departmentally.

(2) Minor Forest Produce.

Minor forest produce was, as usual, either farmed out or sold on permits in all the Circles except in the Kanara Western Division.

Hirda (*Terminalia chebula*) fruit was collected from the Rajur range forests on the " quota " or share system as hitherto. The total collection amounted to 53 *khandis*, 11 maunds and $3\frac{3}{4}$ *payalis*. This was sold by tender at Re. 1 per bag of 20 *payalis*, the revenue realised being Rs. 643, the same as last year.

In the Kanara Western Division certain of the most important minor forest products such as *hirda* (*Terminalia chebula*) fruit, nux-vomica (*Strychnos nux-vomica*) and *shikekai* (*Acacia concinna*) were collected in pursuance of a scheme proposed by Mr. S. K. Kallapur, B.A., LL.B., of Honavar and approved by Government. According to this scheme, the exploitation of minor forest produce is to be entrusted to Village Panchayats. Pending the formation of such Panchayats, Mr. Kallapur arranged to collect, through the village committees and villagers, certain quantities of minor forest produce at central stations and an amount of Rs. 1,880 was paid to the villagers during the year as part payment for

collection after the produce was examined, weighed and valued in the presence of a representative of the villagers. By this time the steamer communication with Bombay having stopped with the approach of the monsoon, there was no demand for the material stored at central stations. Attempts for its disposal are now being made.

Tali (*Corypha umbraculifera*) palms are now being given free to deserving people in certain coastal talukas of Kanara. Cane is allowed free for domestic use and for cottage industries and is sold on permits only when it is required for direct sale.

Grass and grazing fetched Rs. 1,62,322 against Rs. 1,67,769 last year. This revenue now represents the sale proceeds of grass from closed areas and kurans, surplus to grazing requirements, and grazing fees levied on cattle coming from Indian States or other provinces.

(*a*) Agency of Exploitation.

(1) *Departmental Agency.*

The following is a comparative statement of major and minor forest produce extracted departmentally during the two years 1939-40 and 1938-39 :—

Circle.	Year.	Major Forest Produce.			Sandalwood value.
		Timber Cft. in thousands.	Fuel Cft. in thousands.	Total Cft. in thousands.	
					Rs.
Northern	1939–40 ..	51	403	454	75
	1938–39 ..	86	420	506	4
Central	1939–40 ..	93	533	626	327
	1938–39 ..	165	387	552	115
Southern	1939–40 ..	792	2	794	82,619*
	1938–39 ..	669	1	670	96,866
Total ..	1939–40 ..	936	938	1,874	83,021
	1938–39 ..	920	808	1,728	96,985
Difference ..	....	+16	+130	+146	−13,964
Percentage of departmental to total outturn from all agencies ..	....	14·7	1·9	3·4	100

* Value of material extracted but not sold during the year.

Circle.	Year.	Minor Forest Produce.			
		Bamboos value.	Grass and grazing value.	Other produce value.	Total value.
		Rs.	Rs.	Rs.	Rs.
Northern	1939-40 ..	23	..	1,292	1,315
	1938-39 ..	15	..	643	658
Central	1939-40 ..	..	..	..	..
	1938-39 ..	..	..	..	..
Southern	1939-40 ..	20	..	2,000	2,020
	1938-39 ..	54	..	86	140
Total ..	1939-40 ..	43	..	3,292	3,335
	1938-39 ..	69	..	729	798
Difference ..	....	−26	..	+2,563	+2,537
Percentage of departmental to total outturn from all agencies ..	....	..	..	..	..

The increase under timber and fuel is contributed to by the Southern and Central Circles. In the former large quantities of saleable material was obtained from thinnings made in plantations and in the latter more fuel than usual was produced from areas handed over to the Revenue Department and from the trees uprooted on alignments for new roads. The fuel depots of Mahableshwar and Panchgani also required more fuel than last year.

The value of sandalwood sold showed a decrease as the quality of that, exploited during the year in Dharwar, Bijapur and Belgaum was inferior to that exploited last year. The increase under other minor produce is due mainly to the collection, as an experimental measure, of *hirda* (*Terminalia chebula*), *shigekai* (*Acacia concinna*), Nux vomica and such other products, through villagers in the Kanara Western Division, instead of farming them out.

Timber and Fuel Depots.

The following table compares the average prices obtained for timber during 1939–40 and 1938–39 in the Dandeli depot in the Southern Circle. The prices obtained during the year are, in almost all cases, higher than those of the previous year, the rise being due to the international situation :—

Kind of timber.	Average rate per *khandi* of 12·50 cubic feet.	
	1939–40.	1938–39.
	Rs. a. p.	Rs. a. p.
Teak (*Tectona grandis*)	27 2 2	25 11 5
Matti (*Terminalia tomentosa*)	11 12 4	9 15 0
Nana (*Lagerstroemia microcarpa*)	12 3 1	10 5 2
Honne (*Pterocarpus marsupium*)	17 15 1	13 15 7
Karimuttal (*Ougeinia dalbergioides*)	15 1 7	17 6 11
Sissum (*Dalbergia latifolia*)	12 4 3	10 5 8
Heddi (*Adina cordifolia*)	10 7 5	10 15 2
Other jungle woods	9 10 5	9 6 0
Teak battens	20 0 1	17 0 0
Teak scantlings	26 5 4	21 6 0
Teak planks	43 1 9	36 4 0

The average price obtained for teak (*Tectona grandis*) at the Kodibag depot was Rs. 21-15-3 per *khandi* against Rs. 23-15-2 last year.

Fuel Depots.

The six fuel depots in the Kanara Western Division and the Mahableshwar and Panchgani depots in the Satara Sub-Division were worked through contractors. The only departmentally worked depot was at Matheran and there being sufficient stock on hand, no coupe was worked for supply of fuel to the depot. 6,334 maunds of fuel were sold for Rs. 3,738, the expenditure excluding establishment charges being Rs. 590. The net surplus of Rs. 3,265 after deducting the cost of permanent establishment only was paid to the Matheran Municipality.

(ii) Purchasers.

The following table compares the outturn of major and minor forest produce removed by consumers and purchasers during the years 1939–40 and 1938–39 :—

Circle.	Year.	Major Forest Produce.			
		Timber.		Fuel.	
		Cft. in thousands.	Value.	Cft. in thousands.	Value.
			Rs.		Rs.
Northern	1939–40 ..	2,915	13,04,282	7,815	18,887
	1938–39 ..	2,858	13,95,264	8,321	23,929
Central	1939–40 ..	806	3,28,979	4,754	49,779
	1938–39 ..	2,267	3,56,297	5,612	59,448
Southern	1939–40 ..	1,485	5,13,992	6,163	1,92,869
	1938–39 ..	1,486	5,46,673	5,295	1,77,503
Total ..	1939–40 ..	5,206	21,47,253	18,732	2,61,535
	1938–39 ..	6,611	22,98,234	19,228	2,60,880

Circle.	Year.	Minor Forest Produce.			
		Bamboos value.	Grass and grazing value.	Other produce value.	Total value.
		Rs.	Rs.	Rs.	Rs.
Northern	1939–40 ..	15,885	53,814	36,677	1,06,376
	1938–39 ..	18,523	51,179	30,717	1,00,419
Central	1939–40 ..	9,849	1,07,629	35,958	1,53,436
	1938–39 ..	10,918	1,15,265	34,899	1,61,082
Southern	1939–40 ..	64,023	363	26,202	90,588
	1938–39 ..	64,167	804	26,908	91,879
Total ..	1939–40 ..	89,757	1,61,806	98,837	3,50,400
	1938–39 ..	93,608	1,67,248	92,524	3,53,380

It will be noted from the foregoing table that both the quantity and value of timber extracted during the year show a decrease from last year. The introduction of the minimum wage conditions imposed on the contractors in the Thana and Kolaba districts had an adverse effect on the coupe sales ; not only were the prices obtained for the coupes sold rather lower than might be expected, but some coupes were not sold. In the Southern Circle fewer coupes yielding timber were sold during the year. These causes coupled with the non-sale of coupes due to reasons given in Chapter II under the heading " Control " account for the drop in the outturn and revenue under timber.

There were no great variations in the total quantity and value of fuel removed by consumers and purchasers during the year as compared with the last year.

Except under "Other produce" there is a small decrease in the value realised for minor forest produce. The value of the bamboos removed from the forests of the three Circles shows little deviation from that of last year. The drop in the number of outside cattle that visited the forests of this province for grazing and the non-sale of grass on permits in the West Khandesh division due to partial famine conditions account for the decrease under grass and grazing. There was an increase in the receipts under "Other produce" due to better prices realised.

It may be noted here that the Collector of Thana has, at the suggestion of this department, put a stop to the old practice of the selling of tree growth in wood land plots by subordinate Revenue officials. The tree growth in these plots is now sold once a year along with the forest coupes. The excellent results which accrued by such sales during the year have amply justified the change in the old defective system which entailed loss of revenue to Government.

(*iii*) *Rights, Privileges and Free grants.*

The following table is a comparative statement of the quantity and value of forest produce removed by right and privilege holders and free grantees during the years 1939–40 *and* 1938–39 :—

Circle.	Agency	Major Forest Produce.				Minor Forest Produce.			
		Timber.		Fuel.					
		Quantity Cft in thousands.	Value.	Quantity Cft in thousands.	Value.	Bamboos Value.	Grass and grazing Value.	Other produce Value.	Total Value
			Rs.		Rs.	Rs.	Rs.	Rs.	Rs.
Northern ..	C	..	..	11,022	2,21,183	75,591	9,68,608	1,22,727	11,66,926
	F	19	9,338	..	..	285	..	4,867	5,152
Central ..	C	..	..	6,905	1,46,000	..	6,26,711	1,22,089	7,48,800
	F	41	14,637	105	3,070	603	..	24,862	25,465
Southern ..	C	116	19,601	10,075	1,11,439	3,025	4,84,307	45,527	5,32,859
	F	52	15,948	..	..	1,440	..	11,328	12,768
Total 1939–40	C	116	19,601	28,002	4,78,622	78,616	20,79,626	2,90,343	24,48,585
	F	112	39,923	105	3,070	2,328	..	41,057	43,385
Total 1938–39	C	324	24,237	25,647	4,60,065	80,210	20,65,711	2,79,300	24,25,221
	F	98	35,187	3	81	1,308	..	15,358	16,666

C = Concessionists. F = Free grantees.

As compared with last year, concessionists have during the year under report removed less timber and more fuel. The increase in fuel is chiefly due to the larger quantities used by the concessionists in Southern Circle for the manufacture of jaggery. Both the volume and value of free grants of timber and fuel have increased during the year.

The only recognised rights are those of way. Villagers enjoyed as usual the various privileges allowed under settlements, local rules and other Government orders. The quantity of forest produce removed varies according to the requirements of the privilege holders.

Free grants of timber were given to poor people for reconstruction of houses destroyed by fire and for construction of and repairs to temples, mosques, chawadis, etc. These include a free grant of timber to the value of Rs. 2,375 given to 88 villagers of Shivkar in the Kolaba division whose houses were destroyed by fire. About 13 *khandis* of teak (*Tectona grandis*) logs and 82 teak rejected sleepers were given free of royalty to the Lamani Training Class of Bagalkot and one *khandi* of teak and two *khandis* of jungle wood was supplied to the Borstal School, Dharwar.

Government has sanctioned a free grant of one *khandi* of timber in the round to the Manual Training Class attached to the New English School, Poona.

Orders were received from Government during the year that no free grants of timber should be made to any individual educational institution.

Privileges and Concessions.

Additional privileges granted to the people during the year are summarised below :—

(1) The border villages from the Jawhar State which render assistance in the matter of silvicultural operations and fire protection have been permitted to graze their cattle in the forests of Thana on payment of half the usual rate of Re. 1 per head of cattle.

(2) The shrub *dhaiti* (*Woodfordia floribunda*) has been included in the Thana Privilege Code and may now be cut free for ash manure.

(3) The people of non-forest villages in Thana are allowed to remove dead leaves from reserved forests on payment of a fee of 8 annas per cartload.

(4) As a result of the representation made by the villagers of Akrani to His Excellency the Governor during his visit to Dhadgaon in January 1940, the permit rate of *bamboos* was reduced from Re. 1 to annas 12 per hundred in the case of local inhabitants of the Akrani Mahal.

(5) The royalty rate charged for bamboos in the Shirpur ranges of the West Khandesh Sub-Division has been brought to the level of those prevailing in other Satpuda ranges.

(6) *Tarwad* (*Cassia auriculata*) bark in the West Khandesh District instead of being sold by public auction is now allowed to be removed by *chambhars* (shoemakers) at fixed permit fees for *bona fide* tanning purposes. In the Dhulia Taluka the rate to be charged by kuran contractors for grass removed from kurans by villagers for their own use has been limited to one anna per headload.

(7) The privilege of removing wood for agricultural implements at half the market rate is extended to certain forest villages in the Belgaum District.

(8) The concession of free removal of *karvi* (*Strobilanthus callosus*) for agricultural purposes is granted to villages in Kanara and to certain forest villages in the Belgaum District.

(9) The existing rate per cartload of *karvi* (*Strobilanthus callosus*) in the Belgaum District is reduced.

(10) No fees are now levied when permission is granted for digging wells or channels in forest areas for agricultural purposes.

(11) Certain privileges mentioned in the Kanara Privilege Code were extended to some villages in the Dharwar and Belgaum Districts bordering on the Kanara District.

(12) Sandalwood carvers of Kanara are given a certain quantity of sandalwood required for their profession at a rate 75 per cent. below its market value.

(13) The present permit rate for *medar* (*Dendrocalamus strictus*) and *dowga* (*Bambusa arundinacea*) bamboos is reduced to Rs. 3 per 100 in the case of members of a Co-operative Society formed of Medars manufacturing baskets in the Bijapur, Dharwar and Belgaum Districts.

(14) *Bona fide* agriculturists in Kanara are allowed free removal of *shige* (*Acacia concinna*) pods for their domestic use.

Additional privileges sanctioned at the request of Forest Advisory Committees are mentioned in Chapter VIII.

(*c*) Outturn and Sources of Forest Produce.

The outturn from all sources of forest produce during the two years 1939-40 and 1938-39 compares as follows :—

Circle.	Year.	Major Forest Produce.			Minor Forest Produce.		
		Timber C. ft. in thousands.	Fuel C. ft. in thousands.	Sandal-wood Value.	Bamboos Value.	Grass and grazing Value.	Other produce Value.
				Rs.	Rs.	Rs.	Rs.
Northern ..	1939-40 ..	2,985	19,240	75	91,784	10,22,422	1,65,563
	1938-39 ..	2,962	19,704	4	94,390	10,19,787	1,54,138
Central ..	1939-40 ..	940	12,297	327	10,452	7,34,340	1,82,909
	1938-39 ..	2,457	12,317	115	11,021	8,23,767	1,53,699
Southern ..	1939-40 ..	2,445	16,240	82,619	68,508	4,84,670	85,057
	1938-39 ..	2,534	13,005	96,866	69,784	3,89,405	79,490
Total ..	1939-40 ..	6,370	47,777	83,021	1,70,744	22,41,432	4,33,529
	1938-39 ..	7,953	45,086	96,985	1,75,195	22,32,959	3,87,267
Difference between 1939-40 and 1938-39.		− 1,583	+ 2,001	− 13,964	− 4,451	+ 8,473	+ 46,262

(*d*) Forest Labour and Wages.

The annual forest operations such as exploitation of forests, construction of and repairs to buildings, roads, etc., provide employment for a considerable number of people. The following table is an estimate

of the labour employed on forest works and remuneration paid during the year :—

Circle.	Agency of employment.	No. of labour units.	Aggregate amount earned.
			Rs.
Northern	Departmental ..	315,412	90,475
	Contractors ..	4,542,667	14,54,140
Central	Departmental ..	90,731	39,130
	Contractors ..	1,663,110	5,38,000
Southern	Departmental ..	263,351	1,36,982
	Contractors ..	1,473,560	7,13,901
Total ..	Departmental ..	669,494	2,66,587
	Contractors ..	7,679,337	27,06,041

As an experimental measure minimum rates of wages were fixed in the case of labour employed by coupe contractors in the Kolaba and the three Thana Divisions. The contractors were required, under the terms of their agreements, to pay the labourers at these rates and to keep regular account of the work done and payments made. There is no doubt that the labourers were benefited by this measure, but it is reported that the contractors found the conditions difficult to carry out in practice and the accounts kept by them were at times found to be incomplete. As stated previously in this Chapter, the introduction of this condition has adversely affected the sales of coupes. In order to ensure that the labourers are paid according to the rates fixed by Government it has been suggested that a special Backward Class officer should tour Kolaba and Thana during the working season to supervise the contractors' accounts and to question the people as to the wage they are paid. The suggestion is an excellent one.

(e) Utilization.

A new post of Forest Utilization Officer was created during the year with the object of stimulating the more extensive utilisation of forest products some of which remain unexploited for want of markets, or fetch inadequate prices at present, developing forest industries and providing a liaison between commercial bodies and the Forest Department. Mr. J. V. Karamchandani of the Bombay Forest Service Class I was appointed to that post. After undergoing a course of practical training in the Utilisation Branch of the Forest Research Institute, Dehra Dun, for a period of 2 months he visited a number of woodworking institutes and factories in Northern India and assumed charge of the post on

1st November 1939. Since then he has been engaged for the most part on behalf of the Supply Department of the Government of India on the inspection of timbers purchased by that Department and in attending to enquiries regarding timber stocks, etc., in connection with the war. He has, nevertheless, started a study of local conditions and is collecting statistics required for his work as Utilisation Officer, more especially with regard to the possibilities of manufacture of straw-boards, packing cases, textile requisites such as shuttles, bobbins, etc., sports requisites, stationery articles and shoe-lasts and heels, most of which are at present imported from other countries. He also replied to enquiries from several private firms and Government Departments and supplied to them samples of timber and minor forest products, with the co-operation of Conservators.

INDUSTRIES.

The conversion of forest trees into timber, charcoal and fire-wood and putting the same on the market is a major forest industry giving employment to thousands of labourers. The Department also, as usual, supplies information to enquirers about any raw material available in the forests for industries, its quantity, approximate costs of exploitation, etc., or when possible, undertakes to supply the raw products, in some cases at concession rates. Help rendered in this manner and the investigations carried out are described below :—

(1) *Match manufacture.*—*Simul* (*Bombax malabaricum*) coupes in the Panch Mahals Division intended for supply of wood to match factories were sold at favourable prices. The matchwood coupes in the Thana Divisions remained unsold for want of demand.

The Belgaum Match Factory is allowed to remove certain softwoods up to 12 tons a year at a nominal rate of Rs. 4 per ton for 2 years. This concession was sanctioned by Government just after the close of the year.

(2) *Destructive distillation of wood.*—The Bharat Wood distillation Factory in the Belgaum Division, referred to in the last year's report, was given during the year 2 coupes at average rates, but the factory is still not working and practically no progress was made during the year. In spite of some work done after the close of the year, it is doubtful whether this concern will ever be a commercial success.

(3) *Charcoal manufacture.*—In order to encourage this industry some coupes in Kanara Western Division were sold for the specific purpose of manufacturing charcoal. Both the methods of manufacture, viz., (1) by ordinary country type kiln and (2) by the portable " Frikiln " designed by the Forest Research Institute, Dehra Dun, were demonstrated but the industry does not appear to be popular amongst the contractors. Every contractor who sent a trial consignment to Bombay complains of loss in the transaction. Apparently charcoal from Kanara, owing to the present transport difficulties, cannot compete in the Bombay market with supplies from the Thana forests.

Manufacture of charcoal by Frikiln was demonstrated in the Belgaum division also. Charcoal of superior quality is produced by this process, but the comparatively high initial cost is a handicap for it to compete with charcoal produced by the country type kiln.

(4) *Glass bangle industry.*—The concession to this industry at Ghodgeri in the Belgaum district was continued and the Kajgar Co-operative Association was given a fresh coupe at a reduced concessional rate of Rs. 4 per acre as against Rs. 5 charged last year.

(5) *Slate manufacture.*—Shri Narsinha Saraswati Slate Works, Poona, have been granted the concession of removing certain soft-woods at Rs. 4 per ton for 2 years up to 240 tons per year.

(6) *Catechu manufacture.*—As reported last year Mr. S. K. Kallapur of Honavar was given 300 *khair* (*Acacia catechu*) trees free for the manufacture of catechu. Opt of these he worked 200 trees and the quantity of catechu obtained therefrom was sold for Rs. 693 against an expenditure of Rs. 653. The working of the remaining 100 trees is being watched.

One Mr. R. M. Gokarn was also given free the natural crop of *khair* trees growing in his strip for the same purpose.

(7) *Tali palm seed for the manufacture of buttons.*—There was no demand for this seed either from the public or from the Industrial School started by Mr. S. K. Kallapur at Honavar although the reduced rate of annas 8 per maund of 80 lbs. was continued during the year.

The activities of the Department in exploring the possibilities of starting new industries are briefly stated below :—

(1) *Plywood industry.*—With a view to ascertaining the possibility of a sustained supply of wood for plywood manufacture from certain evergreen forests in the Kanara Eastern and Western divisions, sample plots are maintained at the suggestion of the Forest Botanist, Forest Research Institute, Dehra Dun. The Utilization Branch of the Institute has indicated the uses of the species found in some of these plots and as matters stand at present there is no case for basing the plywood or other sister industry on these forests.

Logs of 37 species suggested by Mr. M. Vithalrao of Dharwar were sent for testing their suitability for plywood manufacture. Results of some of these have been received. A proposal for establishing a plywood factory at Supa in the Kanara district made by Mr. M. Vithalrao was accepted by Government on certain conditions.

(2) *Shuttles.*—Sample pieces of different junglewood species were supplied to Mr. M. Vithalrao as requested by him for testing their suitability for shuttles.

(3) *Cane industry.*—The Master Craftsman, Cane Industry Demonstration, Hubli, was supplied with 82 lbs. of local canes from each of the Kanara Northern and Eastern Divisions to test the possibility of utilising the cane for certain classes of furniture and fitments.

(4) *Fibre plants.*—Samples of fibre of *kittul* (*Caryota urens*) were sent to the Director of Industries with a view to determining the possibility or otherwise of marketing it on an economic basis.

(5) A 100 pound sample of *tali chakka* (*Corypha umbraculifera*), powder was sent to the Industrial Chemist, Department of Industries, Bombay, for testing its suitability for sizing.

(6) About 40 lbs. of dried cinnamon leaves sent from Kanara were also tested by the Industrial Chemist for their oil content and he was of opinion that, if sufficient raw material was available, an industry for distillation of oil from cinnamon (*Cinnamomum zeylanicum*) leaves could be established. He is however conducting tests as to the marketability of the produce before formulating a definite proposal.

(7) Oil seeds of certain species were sent to the Director of Industries, Bombay, who is conducting investigations into the uses of non-edible oil seeds for lighting or other purposes.

(8) Investigations as to the suitability or otherwise of indigenous timbers for the manufacture of various textile and sports requirements are being carried on and specimens of some species have been sent to Dehra Dun for tests, the results of which are awaited.

(9) *Picking arms.*—Twenty-two sticks for picking arms prepared in the Kanara Eastern Division from *nandi* (*Lager-stroemia lanceolata*), *dindal* (*Anogeissus latifolia*) and *dhamani* (*Grewia tiliaefolia*) referred to in the last report were sent by the Forest Engineer to Messrs. Budge Budge Jute Mills, Calcutta, for test. Out of these 3 sticks of *dhamani* survived throughout the test carried out for 24 weeks. The rest were found either cracked or broken and were rejected.

(10) *Seasoning kiln.*—Before any research work can be undertaken with Bombay timbers for their suitability for manufacture of textile requisites, tool handles, etc., it is necessary to have these timbers seasoned properly. A seasoning kiln is therefore being erected at Dandeli at a cost of Rs. 6,100 including the requisite auxiliary machinery, etc. A forester has been deputed to Dehra Dun for training in the working of the kiln.

(11) *Charcoal gas.* -The possibility of developing the use of producer gas from charcoal mainly for traction units is still being examined by the Forest Engineer, Belgaum. The results of the tests so far carried out are satisfactory, the advantage in cost over the ordinary internal combustion engine being 5 to 1 on an average,

CHAPTER IV-A.

Forest Engineering Branch.

The activities of this branch are confined chiefly to surveys of roads, preparation of plans and estimates for roads and buildings and other works, organization of mechanical extraction of timber and supervision, repairs and maintenance of sawmill machinery. The work done during the year is summarised below :—

Surveys.

Nil.

Designs and Drawing Work.

Plans and estimates for about 50 buildings and roads in all the circles were prepared and/or checked by the Forest Engineer in addition to the general supervision of engineering works in progress.

Mechanical Skidding.

Timber was extracted from Series XI-A Compartment 6/22 by the Fordson Log Skidder. The total outturn during the year was 733·96 tons against 936·68 tons last year. The total quantity allotted for the year was 793·66 tons but this could not be extracted as the length of haul was between 2,500 to 3,000 feet. The extraction costs exclusive of overhead charges was Rs. 9-9-5 as against Rs. 6-3-9 in the previous year. The increase was due to length of haul, difficult nature of the country consisting of precipitous rocky slopes, cross ridges, nallahs and outcrops of rocks, enhanced costs of stores, breakdown of the Land Utility tractor and a serious land-slide.

Sawmill.

The following table compares the output of the Dandeli sawmill for 2 years -:—

Description of outturn.	1939–40.	1938–39.
	C.ft.	C.ft.
Teak M. G. Sleepers	90,786	66,867
Teak sawn material	71,837	92,073
Junglewood sawn material	498	237
Total ..	163,121	159,177

The increase in the total output is due to the production of larger sized material, viz. sleepers.

The financial results of working are given below :—

Item.	1939-40.	1938-39.	Difference.
	Rs.	Rs.	Rs.
Revenue	2,67,692	3,73,102	—1,05,410
Expenditure	1,23,344	1,37,229	—13,885
Net profit	1,44,348	2,35,873	—91,525
Capital at charge	1,68,128	77,993	+90,135
Percentage of net profit on capital	85·8	302	

The decrease in the net profit is due to the drastic reduction in its requirements in sleepers and sawn material by the M. & S. M. Railway. Against the stipulated quota of 60,000 sleepers for 1939-40, the Railway, as permitted by the terms of the agreement, took only 30,000 and consequently the large stock of sleepers on hand was, for the purpose of the profit and loss account of the mill, valued at cost of production which is below the rate payable by the railway.

Deadstock and Stores.

The deadstock of the sawmill was checked with the register. Unserviceable articles were either written off under proper authority or repaired. The total value of consumable stores including saws supplied to the mill was Rs. 6,682. No new articles of deadstock were purchased for the mill.

Sawmill Trading Accounts.

The trading accounts of the mill were audited by the Outside Branch of the Accountant General's office.

Private Sawmills in Kanara.

Mr. Sayad Nasroddin Hasansab's mill at Katur in the Kanara Eastern Division worked for about four months and turned out 1,986 cubic feet of sawn material against 5,506 cubic feet in the previous year.

Mrs. Jankibai Sawant's sawmill at Vincholi in the Kanara Northern Division continued to work on conditions similar to those of last year, i.e., the raw material required by the mill is supplied by the Department from a departmental work in the vicinity and all the converted material is delivered at the Dandeli depôt. The outturn of this mill was 10,433

sleepers and 10,670 cubic feet of sawn material. The financial results of this transaction are as follows :—

	Rs.
Sale proceeds of sawn material and sleepers ..	45,497
Price of rejected sleepers recovered from Mrs. Jankibai	2,163
	47,660
Expenditure to Government on raw material at mill site and on payments to Mrs. Jankibai for delivery of the sawn material at Dandeli depot	24,852
Net profit ..	22,808

CHAPTER V.

FINANCIAL RESULTS.

The revenue and expenditure of the year compare with those of the last year and the average of the past quinquennium 1934–35 to 1938–39 as follows :—

Circle.	Year.	Revenue.	Expenditure.			Surplus or deficit.	Percentage of surplus to revenue.
			Conservancy.	Establishment.	Total.		
		Rs.	Rs.	Rs.	Rs.	Rs.	
Northern Circle ..	1939–40 ..	15,24,831	1,46,478	6,15,130	7,61,608	7,63,223	50·05
	1938–39 ..	16,23,095	1,35,011	6,18,734	7,53,745	8,69,350	53·6
	Average ..	17,23,944	1,36,520	5,90,451	7,26,971	9,96,973	57·8
Central Circle ..	1939–40 ..	6,75,268	1,10,899	5,26,370	6,37,269	37,994	5·6
	1938–39 ..	6,00,523	76,402	5,69,292	6,45,694	44,829	6·3
	Average ..	9,71,196	94,271	6,04,865	6,99,136	2,72,060	28·0
Southern Circle ..	1939–40 ..	16,46,224	3,79,760	5,67,900	9,47,660	6,98,564	42·8
	1938–39 ..	17,25,430	4,09,492	5,93,795	10,03,287	7,22,143	41·9
	Average ..	19,30,690	5,17,747	5,75,278	10,93,025	8,37,665	43·4

Circle.	Year.	Revenue.	Expenditure.			Surplus or deficit.	Percentage of surplus to revenue.
			Conservancy.	Establishment.	Total.		
		Rs.	Rs.	Rs.	Rs.	Rs.	
General Direction	1939–40 ..	13,937	33,068	1,91,812	2,25,780	−2,11,843	..
	1938–39 ..	12,909	33,534	1,96,864	2,30,398	−2,17,489	..
	Average ..	7,721	70,920	1,22,716	1,93,636	−1,85,915	
Forest Engineer.	1939–40 ..	345	9,946	33,786	43,732	−43,387	..
	1938–39 ..	8,249	20,585	33,427	54,012	−45,763	..
	Average ..	4,049	13,337	33,506	46,843	−42,794	..
Utilisation Division.	1939–40 ..	..	70	4,928	4,998	−4,998	..
	1938–39 ..	..	..	..	..	..	..
	Average ..	..	..	..	..	..	..
Silvicultural Division.	1939–40 ..	5	792	8,027	8,819	−8,814	..
	1938–39 ..	..	..	..	..	..	..
	Average ..	..	..	..	..	..	..
Total ..	1939–40 ..	38,60,605	6,81,913	19,47,953	26,29,866	12,30,739	31·9
	1938–39 ..	40,60,206	6,75,024	20,12,112	26,87,136	13,73,070	33·6
	Average ..	46,37,600	8,32,795	19,26,816	27,59,611	18,77,989	40·5
Difference between 1939–40 and 1938–39.	....	−1,99,601	+6,889	−64,159	−57,270	−1,42,331	..

Comparing the figures of the year with those of the previous year, it will be noted that revenue has decreased by 1·99 lakhs of rupees and the surplus by 1·42 lakhs of rupees to 12·30 lakhs. The decrease in revenue was chiefly due to the curtailed demand for sleepers and sawn material from the M. & S. M. Railway, reservation of some material of superior quality to meet the probable demand of the Defence Department, non-realisation of the full revenue from the Alnawar-Dandeli Railway, and to lack of demand for coupes and low prices obtained for those sold as a result of the introduction of the minimum wage condition.

The expenditure under conservancy and works has increased by 6·8 thousands of rupees, while that under establishment has decreased by 64·1 thousands of rupees. The former was due to a greater amount being paid as bonus on the sale of malki teak, increase in the rates of wages paid to the labourers in departmental works in the Northern and Central Circles under Government orders and acquisition of I Class Survey Numbers within the forest demarcation line in the Poona Division. The decrease under establishment is chiefly due to the fact that in some cases dual charges were held by officers and in others junior officers were put in charge of divisions in the absence of seniors on leave.

The analysis of receipts and expenditure shows that of the receipts 83·6 per cent. came from major produce, 8·9 from minor produce and 7·6 from miscellaneous sources; while of the expenditure 25·9 per cent. was incurred on extension, constitution, improvement and exploitation and 74·1 per cent. on administrative, executive and protective charges.

The outstandings on account of revenue at the commencement and close of the year were :—

Circle.	On 1st April 1939.	On 31st March 1940.
	Rs.	Rs.
Northern	47,729	69,095
Central	16,815	10,807
Southern	2,00,639	1,89,399
Total ..	2,65,183	2,69,301

CHAPTER VI.

RESEARCH AND EXPERIMENTS.

The filling up of the post of Silviculturist has relieved the divisional staff and Working Plans officers of research work which had hitherto been carried out by them under the direct control of the Chief Conservator's office. Government sanctioned the post in August 1939 and Mr. J. Walker, I.F.S., was selected for appointment, but as his services were requisitioned by the Army on the outbreak of war his appointment had to be cancelled. Mr. E. S. B. Tavener, M.A., I.F.S.,

who had by then returned from leave, was therefore recommended and was appointed by Government. Mr. Tavener attended the fifth Silvicultural Conference held in the last week of October at Dehra Dun and stayed on there for training under the Central Silviculturist, Forest Research Institute. He returned to Poona on 16th January 1940. On his return from Dehra Dun, he devoted his attention to the organization of his office, and the formation of Research Centres and Experimental gardens at Poona and Haliyal.

As his report on the work done since his appointment is being published separately, the experiments ordered by the Conservators and those that were tried by the Divisional Forest Officers only are summarised below :—

(1) In the North Thana Division an experiment to propagate *bamboos* by " layering " was undertaken in Kasa, Sawa and Dahisar ranges. No definite conclusions could be arrived at as the rains during the year were unfavourable.

(2) Efforts were made to propagate lac on *babul* (*Acacia arabica*) in the Sanjan range of the same division from brood lac obtained from Sind. Brood lac was put on lopped *babul* trees which had produced succulent branches and it looked as if the experiment was going to be a great success, but during the following hot weather, the lac had completely disappeared for reasons not properly understood. The experiment will be tried again next season.

(3) The results of the past experiment of reboising thinly stocked grassy areas in the Tansa Catchment area in the East Thana Division are given below :—

(*i*) *Shivan* (*Gmelina arborea*) planted about 5 years ago is about 5′ high with sturdy root shoots.

(*ii*) *Khair* (*Acacia catechu*) 4 years old, wispy and straggling, showing no signs of forming a close canopy early enough to be useful for keeping down grass.

(*iii*) *Apta* (*Bauhina racemosa*), *jambul* (*Eugenia jambolana*), mango (*Mangifera indica*), *kashid* (*Cassia siamea*) and *bamboo* (*Dendrocalamus strictus*), planted 4 years ago have failed completely.

(*iv*) *Kashid* (*Cassia siamea*) dibbled thickly 4 years back, 3′ apart and given subsequent cultural treatment is now fairly dense, though incapable of checking the growth of grass.

The results of experiments introduced in the same division during the year were as follows :—

(1) *Bamboo* layering—18 manwel *bamboos* (*Dendrocalamus strictus*) with rhizomes planted horizontally threw out shoots, 59 were surviving at the end of March 1940.

(2) *Bamboo* cuttings—49 cuttings, 4′ to 5′ long with rhizomes were planted upright 12′ × 12′. Forty-four were surviving at the end of March 1940.

(3) *Jamba* (*Xylia xylocarpa*) seed dibbled in the Tansa area failed to establish itself after germination, mainly due to insect attack and browsing by wild animals.

(4) *Kashid* (*Cassia siamea*) root and shoot cuttings, which had failed in Dehra Dun, were tried out in the Tansa area, in Khardi and Nasik. The plants have successfully established themselves.

(5) Sandalwood (*Santalum album*) seed sent by an enthusiastic agriculturist of Kanara was dibbled in Igatpuri and Khardi ranges and many plants were surviving at the close of the year. Two years old sandal in Igatpuri range is now 4′ to 5′ high.

In the Satara Sub-Division of the Central Circle, 25 eucalyptus plants were obtained from a private nursery at Bhilar and planted in the forest nursery and in the Malcompeth depot compound. All plants except one died. The surviving plant in the Depot compound is reported to be 8′ in height and vigorous.

The seedlings of *Cedrelia serrata* (*lal deodar*) planted in the forests of the same sub-division succumbed some to heavy rain and the rest to cold. Fifteen *Hirda* (*Terminalia chebula*) transplants in the hirda nursery are alive.

Four hundred treated and 100 untreated *hirda* (*Terminalia chebula*) seeds were sown in a nursery at Dhebewadi in the Satara Sub-Division. Of the former 225 seeds, i.e., 56 per cent. germinated and of the latter only one seed, i.e., 1 per cent. germinated.

The results of the experiments carried out in the Southern Circle are as follows :—

(1) An experiment to season *jamba* (*Xylia xylocarpa*) wood to prevent cracking and splitting was repeated this year, since it was considered that the work in this connection during the previous year was not carried out at the proper time. Seventy trees were felled in September 1939 and left *in situ*. They were cut into 200 sleeper pieces in January 1940 and the ends of the pieces were smeared with mud and cowdung. These pieces were sawn into 258 sleepers during January to March 1940. Thirty-five sleepers were rejected and 107 were clamped. All the passed sleepers (107 clamped and 116 unclamped) have had their faces plastered with a mixture of mud and cowdung and are kept in a shed for seasoning.

(2) "*Cuprex*"—*A wood protector*.—One 3′ long piece each of *jamba* (*Xylia xylocarpa*), *kindal* (*Terminalia paniculata*) and teak (*Tectona grandis*) round poles cross cut with the saw at both ends were treated with "Cuprex" (diluted with equal parts of kerosene oil) after removing the bark and drying them beforehand. The treated pieces were buried about 1 foot underground lengthwise after exposure to air for five days. The untreated pieces of each of the above species were likewise buried by the side of the treated ones for comparison of results. Both sets were excavated after one year.

Unlike the untreated pieces, the treated ones of teak (*Tectona grandis*) and *kindal* (*Terminalia paniculata*) were free from decay while there was no marked difference between the treated and untreated pieces of *jamba* (*xylia xylocarpa*) both of which appear sound and fresh.

(3) In order to test the objections to the system of clear-felling with artificial regeneration in working circle II of the working plan for the High Forests of Kanara Northern Division, an area of 20 acres in compartment V-1-Dandeli range, was clear-felled in 1938–39 and was planted during the year with teak (*Tectona grandis*) stumps of plants raised in nurseries from High Forest seed. The stumps have grown well.

(4) The three test plots laid out to ascertain the reason for poor girth increment of sandal (*Santalum album*) in the Belgaum division were maintained by renewing the numbers and rings. The results are under observation.

(5) The experimental sandalwood (*Santalum album*) plantations raised during the years 1934 to 1936 at Nagargali in the Belgaum Division were maintained. In some parts sandal is too thick and it is probable that a thinning will have to be done. Lantana is very dense.

(6) In order to test whether the sandy soil in the coastal tracts of Kanara is suitable for the growth of *cashew* (*Anacardium occidentale*), an experimental plantation of this species was raised at Binge, in Karwar range, by dibbling seed 12′ × 12′ towards the end of May. On July 1st the spacing was increased to 24′ × 24′ and all the 360 plants have survived. They are well established and vary in height from 10″ to 17″.

The Provincial Silviculturist who inspected the plantation expressed his opinion that pure sandy soil is not very suitable for this species and that, for the purpose of comparison, one or more experimental plantations of similar type should be formed in the same locality but in the poorer type of forest area containing porous laterite soil. Steps are being taken to do this.

In order to see the effect on the milk yielding capacity of buffaloes by feeding them with *anajan* (*Hardwickia binata*) leaves, an experiment was started under the guidance of the Live Stock Expert to the Government of Bombay at Borvihir in the Dhulia taluka Twelve buffaloes were taken for the purpose and they were fed with *anajan* leaves for 40 days equally divided into 5 periods of 8 days. The quantity of *anjan* leaves served to each buffalo was gradually increased as follows :—

Period.	Quantity served to each buffalo.
11th January 1940 to 18th January 1940	15 lbs.
19th January 1940 to 26th January 1940	20 lbs.
27th January 1940 to 3rd February 1940	25 lbs.
4th February 1940 to 11th February 1940	30 lbs.
12th February 1940 to 19th February 1940	35 lbs.

The accompanying statement A shows the quantity of milk given by each buffalo while statement B gives the quantities of other fodders and cotton seed served to them in addition to *anjan* leaves.

The condition of the buffaloes during the period was good and they appeared to have relished the leaves since no residue was left. The results of the milk yield indicate that the milk yield was well sustained during the first three periods. There was a rapid fall during the last two periods, which is rather difficult to account for. In the fourth period for two days and in the 5th period for three days no *anjan* leaves were received. There were other difficulties such as change of milkers late milking, allowing the calves to suckle more from the dams which could not be exactly controlled. It is, however, clear from the results of the first three periods, that the feeding of *anjan* leaves sustained the milk yield remarkably well and in some cases even increase the milk yield.

Statement A.

Statement showing the quantity of milk yielded by buffaloes fed on anjan *leaves at Borvihir village, Taluka Dhulia, West Khandesh.*

Serial No.	Name of the buffalo.	Breed.	Age in lactation.	Date of present calving.	Number of months advanced in lactation at commencement of experiment.
					Months.
1	Kharki	.. Country	.. 3	16th August 1939 ..	5¼
2	Navasi	.. Do.	.. 4	21st August 1939 ..	5½
3	Soni	.. Do.	.. 3	20th October 1939 ..	2¾
4	Sakawar	.. Do.	.. 3	25th October 1939 ..	2½
5	Paingan	.. Do.	.. 4	3rd November 1939	2¼
6	Ranjan	.. Do.	.. 3	13th October 1939 ..	3
7	Sundar	.. Do.	.. 4	14th October 1939 ..	3
8	Kousha	.. Do.	.. 4	9th October 1939 ..	3¼
9	Dimakha	.. Do.	.. 6	4th October 1939 ..	3½
10	Ahmedabadi	.. Ahmedabadi	.. 4	12th October 1939 ..	3
11	Butwal	.. Country	.. 4	22nd October 1939 ..	2¾
12	Buta	.. Do.	.. 6	24th October 1939 ..	2½

STATEMENT A—contd.

Serial No.	Name of the buffalo.	Milk yield in lbs. during different periods of feeding.					Remarks.
		Period and quantity of *anjan* leaves fed daily.					
		1st 15 lbs.	2nd 20 lbs.	3rd 25 lbs.	4th 30 lbs.	5th 35 lbs.	
1	Kharki ..	70½	67½	63	37½	32½	Served on 31st January 1940.
2	Navasi ..	103¾	102½	100½	56½	53½	
3	Soni ..	71¾	84½	93	56¾	45½	Calf died on 6th February 1940.
4	Sakawar ..	108½	106½	107½	79	55½	
5	Paingan ..	101½	100¾	102	69	57½	
6	Ranjan ..	102½	96½	96¾	70½	63½	Served on 20th January 1940.
7	Sundar ..	87½	83½	86	63½	45½	
8	Kousha ..	78½	85½	87½	64½	47½	
9	Dimakha ..	80½	77½	71¾	54	45	
10	Ahmedabadi ..	98¾	99½	92	70	63¾	
11	Butwal ..	78¾	71	74½	65½	40	Served on 21st January 1940.
12	Buta ..	56½	52	54½	30½	33¼	Do.

STATEMENT B.

Statement showing feeding of buffaloes at Borvihir, taluka Dhulia, fed on anjan leaves—feeding trial.

Serial No.	Name of the buffalo.	1st period.			2nd period.		
		Kadbi	Chaff.	Cotton seed.	Kadbi.	Chaff.	Cotton seed.
		Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
1	Kharki	12	8	6	10	8	6
2	Navasi	12	8	6	9	7	6
3	Soni	9	8	6	10	7	6
4	Sakawar	10	10	6	11	8	6
5	Paingan	8	..	6	8	..	6
6	Ranjan	Grazing.		6	Grazing.		6
7	Sundar	10	10	6	10	7	6
8	Kousha	16	..	6	13	..	6
9	Dimakha	12	10	6	11	9	6
10	Ahmedabadi ..	8	..	6	7	..	6
11	Butwal	Grazing.		5	Grazing.		5
12	Buta	4	..	4	3	..	4

STATEMENT B—contd.

Serial No.	Name of the buffalo.	3rd period.			4th period.			5th period.
		Kadbi.	Chaff.	Cotton seed.	Kadbi.	Chaff.	Cotton seed.	
		Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	
1	Kharki	8	9	6	10	6	9	..
2	Navasi	9	8	6	11	9	6	..
3	Soni	10	7	6	11	9	6	..
4	Sakawar	8	6	6	12	8	6	..
5	Paingan	6	..	6	9	..	6	..
6	Ranjan	Grazing.		5	Grazing.		6	..
7	Sundar	7	7	6	11	8	6	..
8	Kousha	12	..	6	15	..	6	..
9	Dimakha	9	6	6	12	8	6	..
10	Ahmedabadi	7	..	5	8	..	6	..
11	Butwal	Grazing.		5	Grazing.		6	..
12	Buta	Grazing		4	Grazing.		4	..

CHAPTER VII.

ADMINISTRATION.

The post of Chief Conservator was held by Mr. A. C. Hiley, C.I.E., I.F.S., throughout the year.

The territorial Circles were held by the following officers :—

Northern Circle	..	Mr. H. W. Starte, from 1st April 1939 to 31st March 1940.
Central Circle	..	Mr. R. P. Dalley, from 1st April 1939 to 23rd February 1940.
		Mr. H. P. W. Davis, from 24th February 1940 to 31st March 1940.
Southern Circle	..	Mr. W. C. de C. Walsh, from 1st April 1939 to 12th February 1940.
		Mr. J. B. T. Brooks, from 13th February 1940 to 31st March 1940.

According to the exigencies of administration the usual transfers of officers took place. Owing to paucity of officers it was sometimes necessary to double charges while in some cases junior officers were put in charge of divisions.

Mr. H. C. Holmes, Deputy Conservator of Forests on leave, joined up for service in the Royal Navy with effect from 1st November 1939 and Mr. J. Walker's services were placed at the disposal of the Government of India in the Military Department.

Messrs. J. Dutt, F. A. B. Coelho and V. A. N. Sausman were confirmed in Class I. Messrs. N. S. Kaikini and R. D. Joshi, on the completion of their training at Dehra Dun, joined their duties in April 1940 in the Southern and Northern Circles respectively.

The West Khandesh division as newly constituted was found, by actual experience, to be too heavy a charge for one officer satisfactorily to manage even with the help of a Sub-Divisional Forest Officer. The creation of an independent Sub-division was therefore recommended and was sanctioned by Government at the close of the year.

Subordinate and Clerical Services.

The six Bombay students nominated to Rangers' Training Class at the Agricultural College, Poona, successfully passed at the final examination and were all awarded "honours" certificates. Three of them were posted to the Northern Circle and three to the Southern Circle. The two prizes from the Bell Memorial Fund—one for Botany and the other for Silviculture—were awarded as follows :—

Prize in Botany	..	Mr. S. P. Jadhav.
Prize in Silviculture	..	Equally divided between Messrs. S. P. Jadhav and P. B. Bidikar as both secured the same number of marks.

The net cost on account of this Class to Government was Rs. 18,508 (Rs. 23,508 expenditure—Rs. 5,000 revenue on account of fees received from the students). This cost approximately equals that which would have had to be incurred by Government had the Bombay students been sent to Dehra Dun for training.

The Class at present is seriously handicapped for want of adequate accommodation. It has no class room of its own, no space for a forest herbarium or museum and hostel accommodation is limited to house only six students. A proposal to have a building costing about Rs. 9,000 for the class and a fairly cheap structure for a hostel is under consideration.

The chief advantage of the class is that, being situated at Poona, the students find it both economical and convenient.

Training of Foresters.

The Foresters' Class at Mandvi in the Northern Circle was, as usual, conducted by a Ranger. Out of the 25 students admitted (14 from the Northern Circle, 10 from the Central Circle and 1 from the Dangs) 22 passed the final examination. Arrangements were again made this year with Police Department for simple instructions in drill.

The annual course for training foresters under selected rangers in the Southern Circle was continued, and all the 12 subordinates who attended the course passed out successfully. As this system of training is not considered entirely suitable, a proposal to open a regular forest class at Haliyal was approved by Government at the close of the year and is awaiting sanction of funds for its introduction.

The work of protective and clerical establishments is reported to be satisfactory.

The depot officer, Malyan (Dahanu Road) in the Northern Circle was assaulted by a Pathan, an employee of a charcoal contractor of Jawhar State. On being prosecuted the accused was ordered to furnish security for good behaviour of six months.

The Range Forest Officer, Manor's personal orderly, who had accompanied the Range clerk to Palghar for cashing a cheque, met with a motor accident and died in the dispensary at Mahim, soon after.

A beat guard in West Thana, while returning after extinguishing a forest fire, was bitten by a Russel's Viper and died in the dispensary at Bhiwandi. His widow is being recommended for a gratuity from the compassionate fund.

A family pension of Rs. 10 per mensem was sanctioned by Government to the eldest son of the beat guard, who as reported in the last year's report, was drowned in the course of his duty while crossing a river which was in flood.

The number of casualties, penalties etc. is tabulated below :—

Particulars.	Northern Circle.	Central Circle.	Southern Circle.	Total 1939-40.	Total 1938-39.
Retirements	35	19	17	71	69
Deaths	7	7	18	32	34
Resignations	9	3	1	13	9
Prosecutions	..	1	..	1	4
Degradations	37	31	5	73	47
Dismissals, removals, etc. ..	19	12	..	31	18
Total ..	107	73	41	221	181

Except in places noted for bad climate where ill-health is common among the subordinates, the health of the staff was reasonably good.

Measures to Suppress Corruption.

Six-monthly reports showing cases of corruption during the period were submitted to Government.

The attention of the staff was drawn from time to time to the standing orders against corruption and unfair dealings with the public. Strict control was maintained over expenditure by surprise checks of as many works as possible and by closely scrutinizing estimates with the ruling rates of wages. Payments to contractors and piece workers were made by cheque as far as practicable directly from Divisional offices. The public were given every facility to report malpractices on the part of subordinates.

INSPECTIONS AND TOURS.

His Excellency the Governor of Bombay visited Yellapur and the surrounding forests in May 1939. He also paid a visit to the Akrani Mahal in January 1940 and camped at Rohini in the West Khandesh division for some days in February 1940.

Dr. S. N. Kapur of the Forst Research Institute visited Dandeli in January 1940 in connection with the erection of a seasoning kiln.

The Chief Conservator toured in all the Circles.

The Conservators while touring inspected all the Divisional Forest Offices in their respective Circles. No serious irregularities were noticed.

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Conferences.

The Chief Conservator and the Utilization Officer, Bombay Province, attended the conference of the heads of Forest Departments of all the Provinces and States held at Delhi on the 28th and 29th of March 1940 to consider the question of supply of timber for war purposes.

The Chief Conservator also attended the meeting of the Forest Utilization Central Advisory Board held at Dehra Dun from 2nd to 5th April 1940.

Mr. E. S. B. Tavener, the Silviculturist, Bombay Province, attended the fifth Silvilcultural Conference at Dehra Dun.

Civil Suits.

The appeal filed by Mr. G. N. Mohite against the decision in the suit brought by him claiming ownership over the aftergrowth of teak in certain survey numbers in Talasari in the Thana District was dismissed.

The civil suit filed by Mr. M. G. Pethe of Umbergaon claiming ownership over aftergrowth of teak in certain survey numbers of Vase in the same district is still pending.

The fresh suit brought by Mr. P. D. Billimoria against Government and Mr. Y. R. Divekar, Divisional Forest Officer personally, for wrongful dismissal and damages was dismissed with costs.

The suit filed by Mr. S. N. Pithawala against Government and Mr. Y. R. Divekar, personally, was decided by the First Class Sub-Judge, Thana, who ordered that Government should pay the plaintiff Rs. 225 and his costs of suit on part of the claim allowed. The suit against Mr. Divekar was dismissed.

A suit filed against Government in 1932 by Mr. A. R. Yellappur is still pending re-trial in the First Class Sub-Judge's Court, Karwar.

Land Revenue Administration.

The Divisional Forest Officer, West Nasik, continued to function as Assistant Collector and Excise Superintendent of Peint Mahal.

The excise and revenue administration of the Akrani Mahal was carried on as hitherto by this Department. The Raisingpur Estate continued to be managed by this Department under the Court of Wards.

Dalhi & Kumri (Shifting cultivation).

Almost all the *kumri* villages in the Belgaum division were inspected by the Divisional Forest Officer and all reasonable complaints and grievances were redressed after thorough investigation. The request, of some villagers of Pargad to allot an area of about 400 acres for *kumri* is being enquired into.

Dalhi plots measuring 62 acres and 27 gunthas and assessed at Rs. 6-7-8 were resumed during the year leaving 27,714 acres and 22 gunthas under this form of cultivation in the Kolaba division. The assessment collected during the year including past arrears amounted to Rs. 3,225-11-4.

Forest Village Panchayats.

The four panchayats in the Kanara Northern Division continued to function as in the previous year.

Only 2 out of the 13 panchayats in the Kanara Western Division did any work of improvement by planting seedlings of useful species in their forests. In one panchayat in the Kumta Taluka much forest area is reported to have been cut for *kumri* under the guise of clearance. Such clearances are not conducive to forest conservancy. The forests in all other panchayats were maintained and protected by the managements without any internal friction.

Dangs Forest Administration.

Since the transfer on 1st July 1933 of the Dangs to the control of the Government of India, the administration of the tract continues to be done by the staff lent by this Department. The question governing the loan of personnel for the purpose has recently been decided. Some subordinates have been transferred permanently to the Dangs cadre, some have been retained on foreign service terms with 20 per cent. addition to their pay and the rest re-transferred to the Bombay Province.

Relations between the Forest Department and other Departments.

These remained as cordial as in former years.

CHAPTER VIII.

GENERAL

A perusal of the preceding chapters will show that considerable progress was made in regenerating forests and in encouraging tree planting by private persons. The first year's results of the "Gradoni" system of reboising dry barren hill sides in the Northern and Central Circles were, in spite of scarcity of rain, promising in that there was an improved growth of grass and a fair percentage of germination of the seeds of various tree species sown. Its effect on erosion in Mohodari area in the East Nasik division, which receives more rain than elsewhere in the tract, was satisfactory. Forest policy has been liberalised and many extra concessions and privileges have been allowed to the people. Assistance to existing industries in deserving cases was continued and steps are in progress to investigate the uses of several forest products as an opening to new industries.

The outstanding event of the year was the outbreak of war. This has not so far led to any very big demand for timber for war purposes, but there were numerous enquiries for tent pins, bamboos, poles, sawn wood etc. and a great deal of work has been done in collecting information, quoting quantities, rates etc. as a preliminary to undertaking any possible supply in future. After the close of the year orders for the supply of 1,20,000 *ballies* (teak poles) and an educational order for 3,000 bamboos for tent poles were received. These supplies are being made departmentally from all the Circles. The services of the Utilization Officer, Bombay Province, have been placed practically whole time at the disposal of the Government of India Department of Supply for inspecting timber purchased by that Department from various firms and for attending to other enquiries on behalf of that Department. So far no reaction in the timber market is noticeable on account of the war, though there has been some tendency amongst certain contractors to gamble on a rise in prices.

There was a marked drop in the business with the M. & S. M. Railway, which took only 30,000 M. G. sleepers and 94 tons of sawn wood against 84,999 sleepers and 493 tons of logs and sawn wood in the previous year. This together with the non-sale of several coupes in the Thana and Kolaba divisions affected the revenue of the department so much that in spite of the fact that expenditure was kept as low as possible, there was a decrease in the surplus.

Alnawar-Dandeli Railway.

The recorded revenue and expenditure of the Alnawar-Dandeli Railway show a net profit of Rs. 4,208 (Rs. 29,405 receipts *minus* Rs. 25,197 expenditure) or 14·3 per cent. on gross receipts against Rs. 13,255 (Rs. 56,778 receipts *minus* Rs. 43,523 expenditure) or 23·3 per cent. of the previous year. The figures for 1939-40 do not represent the true result of the working of whole year since the receipts and expenditure for the last three months i.e., January to March 1940 were not adjusted during the year for want of account sheets from the Railway Account Office.

But even if the financial results for the complete 12 months were available, the net profits would probably not have reached the level of those of the last year since there was considerable reduction in the manganese traffic partly due to lack of shipping space and partly to restrictions on exports owing to the war.

Hunting and Shooting.

The revenue realised from this source during the year was Rs. 7,582 against Rs. 8,621 in the previous year.

The details of animals killed in Government forests are given below :—

All India S. No.	Animal.	Northern Circle.	Central Circle.	Southern Circle.	Total.	Average of 5 years 1934–35 to 1938–39.
1A	Tiger	2	9	9	20	32
1B	Tigress ..	2	3	1	6	8
2	Panther ..	15	15	22	52	64
3	Wild cat ..	..	..	..	..	1
6	Hyena ..	..	..	..	..	1
8	Wild dog ..	..	2	2	4	1
14	Sloth bear ..	..	4	4	8	10
15	Wild elephant ..	..	..	22	22	16
17	Bison ..	..	..	28	28	18
29	Blue bull ..	2	83	..	85*	23
30	*Bhekar* (4 horned antelope).	..	..	..	..	4
32	*Chinkarn* ..	..	1	..	1	2
33	Barking deer ..	..	..	1	1	2
37	*Sambhar* ..	..	7	13	20	16
38	*Cheetal* ..	5	5	12	22	15
46	Wild pig ..	12	582	447	1,041*	638
	Total ..	38	711	561	1,310	851

* Includes 1,004 pig and 78 blue bull killed by the various gun clubs in the Central and Southern Circles.

There was a good deal of illicit shooting particularly in areas round Nagargali and Londa in the Belgaum division where even some village baffaloes were shot at night in mistake for bison. There was no proof as to who had done the shooting and no action could therefore be taken. Since the close of the year, rules to control indiscriminate night shooting have been issued and such cases of illicit shooting will, it is hoped, be reduced.

Rewards amounting to Rs. 1,680 were granted by the Revenue Department for killing wild animals in Kanara, Belgaum and Dharwar districts as under :—

	Rs.
Wild elephant	1,250
Wild dog	5
Wild pig	425
Total ..	1,680

Increase or decrease in the number of Wild Animals and Birds.

There was no noticeable increase or decrease in the animal or bird population in forest tracts except to the extent mentioned below :—

In the Panch Mahals where the Government forests are honeycombed with Talukdari and State forests considerable illicit shooting continues with the result that game is gradually being exterminated. Due to destructive poaching habits of the villagers in North Thana wild animals have considerably decreased and may become extinct. Bison in the high forests of the Kanara Northern and Eastern divisions and wild animals generally in the western portions of the Belgaum division are increasing. In the eastern parts of the Belgaum division, however, wild animals are decreasing.

Gun Clubs.

Four new gun clubs were started in the Dharwar district. 138 pig in Kanara, 13 in Belgaum, 274 in Dharwar and 13 in the Bijapur districts were killed. It is reported that the pig hunting expeditions have relieved the cultivators to a great extent of watching their crops at night and have also helped generally to protect the crops against damage.

The gun clubs in the Satara Sub-Division and Kolaba division killed 238 and 5 pig respectively while those in the East Khandesh division killed 323 pig and 78 blue bull.

The permission granted last year to form a gun club at Kalyan was not availed of by the people. There is no likelihood of such a club being formed, unless the Government Shikar Officer can spare time to travel widely throughout the district and encourage the people to organise such a club on proper lines. The Divisional Forest Officer, West Thana, thinks that such clubs will be very useful in preventing poaching, as pig shooting appears to be the favourite sport of gun licencees of Bombay and Thana and also of the local villagers. The formation

of gun clubs might provide legitimate exercise for the guns of the license-holders and divert their activities to useful channels, reducing to a certain extent wanton killing of *cheetal* and *sambhar* which is widely prevalent.

In-forest Settlements.

No new settlements were opened during the year. The assessment revenue realised during the year amounted to Rs. 18,678 in the Northern Circle and Rs. 55,560 (including Rs. 14,848 of past arrears) in the Central Circle. The total amount outstanding against the settlers in the Central Circle at the close of the year was Rs. 1,130.

Tagai amounting to Rs. 4,600 was granted to the forest settlers in the East and West Khandesh divisions. Out of the total amount due viz. Rs. 6,571–0–0 (Rs. 4,600 *plus* Rs. 1,971 previous year's balance) Rs. 5,139–2–0 were recovered leaving a balance of Rs. 1,431–14–0.

The condition of the settlers was on the whole good.

There is considerable demand for land for cultivation in the Northern Circle in almost all the districts but no further grants can be made, as all available land suitable for cultivation has been given out and further grants would only mean curtailment of grazing areas and fuel and timber supply.

Two settlers from Vishnupur settlement in the East Khandesh division lost their lives while putting out forest fires. The widow of one of the deceased settlers and the son of the other have been given plots in the settlement for their maintenance. The question of granting some land to the latter is also under consideration of the Revenue Department. The revision of forest settlements in Taloda range could not be completed as no ranger could be spared for the work.

Reserved teak (*Tectona grandis*) in Varkas lands in Thana.

20 per cent. of the sale proceeds of teak (*Tectona grandis*) in *varkas* lands in the Thana district is paid as bonus to the occupants and 30 per cent. to the District Local Board for works of public utility, more especially for improvement of communications and water supply in the interior villages of the district. The total amount thus paid to the Local Board since 1932–33 is Rs. 77,733–11–0. Practically nothing was done up to last year to utilise the money for any works of public utility. In August 1939 the Collector convened a meeting of District Officers to review the situation caused by the absence of rain and various works to be financed from the 30 per cent. bonus to provide labour to the villagers were suggested In the meetings of the Standing Committee of the Bonus Fund subsequently called a new programme of works was sanctioned for (*a*) construction of works of a permanent nature, (*b*) easing the road and cart-track gradients in certain *khinds* (passes) and (*c*) construction of wells. The plans and estimates for these works were prepared by the Local Board. Out of the works sanctioned,

the Kasa dispensary was completed and the construction of several roads and wells was undertaken. Thus it will be noted that during the year active steps were taken for the utilisation of the 30 per cent. bonus fund for works of public utility.

Forest Advisory Committees.

The Forest Advisory Committees established in the Thana, Nasik, Khandesh, Kolaba, Kanara and Dharwar districts held their quarterly meetings and such questions as local supply of forest produce, privileges, grazing facilities, issue of passes, grant of certain reserved trees to *betta* (protected forests set apart for the exercise of privileges by garden holders) holders, system of remuneration to elephant shikaris, free removal of bamboos for cottage industries in Kanara, prohibition of motor cars at night without permit in forests, cutting of forest trees obstructing roads, water supply, etc., were discussed. In the Panch Mahals, there was only one meeting and the most important of the recommendations submitted was that no further grants of forest lands for cultivation or disforestment should be made as such grants in the past were so liberal as to bring the future of the forests and public needs into jeopardy. Questions seeking redress of genuine grievances were favourably considered and the rest were either discussed or dropped. The minutes of those meetings were submitted to Government whose orders on questions beyond the powers of local officers were obtained. The proposal of the Dharwar Committee for the grant of a contribution to the Dharwar District Local Board for the maintenance of roads was negatived by Government and rules designed to check illicit shooting were issued shortly after the close of the year.

Forest Grievances Redressed.

In addition to the grant of privileges mentioned in Chapter IV, some other grievances brought before the above committees were removed. They are as under :—

(1) The short-cut cattle-paths through reserved forests are to be marked out by the Forest Department in order to facilitate fencing by villagers.

(2) The maximum period of validity of permits for minor forest produce was raised from 3 to 4 days.

(3) The concession of free removal of *karvi* (*Strobilanthes callosus*) by forest villagers for agricultural purposes has been allowed in the Northern Circle (except in the Igatpuri, Akola and Rajur ranges) by headloads only.

(4) In the case of forest villagers in the Mandvi range of the Surat Sub-division and Peint Mahal in the West Nasik Division removal of *karvi* (*Strobilanthes callosus*) by cartloads also has been permitted.

(5) The proposal that *ghatbor* (*Zizyphus xylopyra*) in Khandesh should be sold on permit for *bona fide* tanning purposes instead of selling it by auction was sanctioned by Government after the close of the year.

Exhibitions.

The Forest Department participated in one exhibition viz., that at Satara held under the auspicies of the Maharashtriya Shareerik Shikshana Parishad. A forest stall was opened in this exhibition and demonstrations as regards the use of raiwal (junglewoods) and of soft woods for industrial purposes such as match making etc., and medicinal uses of various forest shrubs, etc., were given.

Cattle Breeding Societies.

The Gilligan Cattle Breeding Farm at Pimple in the East Khandesh division is reported to be flourshing.

The question of supplying a couple of stud bulls to the forest settlers of the East and West Khandesh divisions was decided after the close of the year. Two stud bulls were purchased at Government cost and supplied to the settlers of Lalkdya Hanuman and Ambapur settlements in the West Khandesh division.

Grass Storage Scheme.

The storage of grass at Godhra stood at 9¼ *lakhs* lbs. both at the beginning and close of the year. But owing to the threatened scarcity of fodder, the contractors were notified under instructions received from Government that the whole quantity would be required this year and it was accordingly made over to the Revenue Department after the close of the year. The grass contractor at Palghar is, as per terms of his contract, required to supply grass to Government at a fixed rate when a notice is given to him by a stipulated time.

Scarcity of Rain and Consequent Fodder Famine.

An acute fooder famine occurred in the Gujarat and Ahmednagar districts during the year. In order to ease the situation Government ordered that a contract should be entered into for the supply of 7 *lakhs* lbs. of grass to the famine stricken areas in the Ahmednagar district according to the Collector's request. Accordingly a contract was given for the supply of the requisite quantity of grass at Rs. 14 per 1,000 lbs. from the Sidwadi kuran in the East Nasik division. When about 1½ *lakhs* lbs. were supplied, the Collector reported that no more grass was required and further consignments were stopped. But the department had to purchase the stipulated quantity viz. 7 *lakhs* lbs. as per agreement. The contractor, however, consented to accept the rate of Rs. 13 per 1,000 lbs. instead of Rs. 14 as he was absolved from loading the grass into waggons. The surplus grass is being disposed of now by the Sub-Divisional Forest Officer, West Khandesh. As regards Gujarat, supplies were made from the Panch Mahals division where grass was plentiful.

In the Central Circle, due to scarcity, grass *kurans* were temporarily opened in the Khandesh divisions and the period for the issue of permits for *anjan* leaves had to be extended by one month. As a measure of relief to the Bhils and Mahars of the Sakri range in the Khandesh division departmental fellings were undertaken and this resulted in their earning Rs. 468-8-0 as wages.

In the Southern Circle at the instance of the Collector of Belgaum all the open forests of the Chandgad and Patne rounds in the Belgaum division were made available to the forest and non-forest villages of the Chandgad Mahal for cutting and removal of grass as scarcity of fodder was occasioned by floods and insect pests.

Assessment on forest lands given for temporary occupation was also remitted to the extent of Rs. 544 as relief to certain *kumri* villagers in the Belgaum district whose crop was damaged by flood and insect.

Provincial Fodder and Grazing Committee.

In all three meetings of the Provincial Fodder and Grazing Committee were held. As recommended in a resolution passed by the Committee in their last meeting a five year scheme prepared by the Forest Engineer, Belgaum, for the improvement of water supplies in grazing areas of the Province costing Rs. 1,18,315 has been submitted to Government for approval. Another question which concerns this department is that of framing suitable grazing rules. The draft grazing rules drafted by this department were published but owing to a large number of objections made by the public, they were not brought into force. Government have ordered that the Collectors should ask the members of the Advisory Committees of their districts to make suggestions as to the lines on which suitable grazing rules for their particular districts should be drawn up and to forward them to the Chief Conservator for further disposal.

Village Improvement Scheme.

Commendable work was again done by Forest Officers in all the Circles during the year in connection with rural development. They explained to the people forest privileges, the value of forests and the need for their protection, the importance of tree planting, sanitation, literacy, cottage industries, storing of green grass in "silo pits", and other matters connected with the welfare of the people. Help and advice were given on the construction and maintenance of roads—a concrete result of which is that the people of Gholwad and Bordi in the Northern Circle undertook the construction of the Gholwad-Khunavda road in the North Thana division partly by raising a popular contribution and partly with the aid of funds sanctioned by the District Local Board from the bonus fund.

A. C. HILEY,
Chief Conservator of Forests,
Province of Bombay.

PRESS NOTE ON THE FOREST ADMINISTRATION REPORT FOR THE YEAR 1939-40.

Afforestations and disafforestations during the year resulted in a reduction aggregating about 33 square miles in the forest areas in charge of both the Revenue and Forest Departments. The total forest area of the Province at the close of the year stood at 12,937 square miles or 17 per cent. of the total land area. The disforestments were chiefly in favour of cultivation. In spite of the fact that so much land has been given out for cultivation the hunger for land for this purpose is still on the increase, particularly in the Panch Mahals and Khandesh divisions, but no further grants can be made, as most of the available land suitable for cultivation has been given out and further grants would only mean curtailment of grazing areas and fuel and timber supply.

2. There was considerable decrease in forest fires during the year, but a general increase in the number of forest offences particularly under unauthorised fellings and grazing. The increase under unauthorised fellings is attributable among other causes in some degree to the liberalization of privileges and concessions, as a result of which larger number of people visit the forests and through ignorance or indifference commit acts which in law are offences. Under grazing the increase was due chiefly to scarcity of fodder in the Panch Mahals, Thana and East Khandesh.

3. During the year 72,783 acres were regenerated by natural means supplemented by plantations raised artificially. The general condition of all the plantations is on the whole satisfactory. In addition plantations were raised by the agri-silvicultural system in the East Nasik division where the total area under this system is now 4,339 acres. This system having proved successful in the East Nasik division, was extended in other divisions with a fair amount of success.

4. The experiments on the lines of the Italian Gradoni system referred to in the last year's report were started during the year. This system consists of making trenches along the contours on hill sides, bunding the nullahs and heaping the earth taken out from the trenches on the outer side. The object of the experiment is two-fold ; to check further erosion and to conserve water in the sub-soil. Six different localities—2 in the Northern Circle and 4 in the Central Circle—were selected for this experiment. These areas are all bare hill sides and receive about 20-30 inches of rainfall. The breadth and depth of the trenches vary according to the nature of the soil but usually they are respectively 2' and 1'. These areas were strictly closed to grazing and a whole time watchman is engaged at each spot to enforce protection against man or beast. The result of bunding in Mohodari in the East Nasik division of the Northern Circle, it is reported, was so successful that erosion was practically absent during the year. Seeds of various species were sown in the trenches and on the slopes of the earth taken

out from the trenches and heaped on their banks. Owing to the poor monsoon in the first year of the experiment it is not possible to judge the results accurately.

5. Germination was on the whole satisfctory and a very fair percentage of the seedlings survived the hot weather. The results in improved growth of grass are clearly visible in all the localities and the subsequent course of the experiment should prove interesting.

6. Wide publicity was given to Government orders regarding concessions granted to the public in the matter of the planting of fruit trees in forest areas. Very few enquiries were received. In all 11 agreements involving an area of about 25 acres were executed. Advice and demonstrations in planting fruit and other trees in *malki* lands were also given by forest officers, and in some cases seedlings were also supplied to the people.

7. The quantity of forest produce removed by departmental agency was 936,000 cubic feet of timber, 938,000 cubic feet of fuel and Rs. 83,021 worth of sandalwood, while that removed through contractors was 5,206,000 cubic feet of timber and 18,732,000 cubic feet of fuel valued at Rs. 21,47,253 and Rs. 2,61,535 respectively and bamboos, grass and other produce valued at Rs. 3,50,400. This extraction of forest produce, it is estimated, provided employment for 83,48,831 persons who earned Rs. 29,72,628.

8. Additional privileges were also granted to the people during the year chief among which are the following. The shrub *dhaiti* (*Woodfordia floribunda*) has been included in the Thana Privilege Code and may now be cut free for ash manure. The people of non-forest villages in Thana are allowed to remove dead leaves from reserved forests on payment of a fee of 8 annas per cartload. The permit rate for bamboos in the Akrani Mahal of the West Khandesh division has been reduced from Re. 1 to annas 12. *Tarwad* bark in the West Khandesh district instead of being sold by auction is now allowed to be removed by *chambhars* (shoe-makers) at fixed permit fees for *bona-fide* tanning purposes. In the Dhulia taluka the rate to be charged by kuran contractors for grass removed from *kurans* by villagers for their own use has been limited to one anna per headload. The privilege of removing wood for agricultural implements at half the market rate is extended to certain forest villages in the Belgaum district. Certain privileges forming part of the Kanara Privilege Code were extended to certain villages in the Dharwar and Belgaum districts bordering on the Kanara district. *Bona fide* agriculturists in Kanara are allowed free removal of *shige* pods for their domestic use.

9. 116,000 cubic feet of timber valued at Rs. 19,601 and 28,002,000 cubic feet of firewood valued at Rs. 4,78,622 and minor forest produce worth Rs. 24,48,585 were removed by right and privilege holders, while free grants of 112,000 cubic feet of timber worth Rs. 39,923, 105,000 cubic feet of fuel valued at Rs. 3,070 and minor forest produce valued at Rs. 43,385 were given in deserving cases.

10. Substantial help was given to various existing industries as follows :—

(1) The Belgaum Match Factory was allowed to remove certain softwoods up to 12 tons a year at a nominal rate of Rs. 4 per ton for 2 years.

(2) The Bharat Wood Distillation Factory in the Belgaum division, referred to in the last year's report, was given during the year 2 coupes at average rates but the factory is still not working and practically no progress was made during the year.

(3) In order to encourage charcoal manufacture, some coupes in Kanara W. D. were sold for the specific purpose of manufacturing charcoal. But the methods of manufacture viz. (1) by ordinary country type kiln and (2) by the portable "Frikiln" designed by the Forest Research Institute, Dehra Dun, were demonstrated, but the industry does not appear to be popular amongst the contractors. Every contractor who sent a trial consignment to Bombay complains of loss in the transaction. Apparently charcoal from Kanara owing to the present transport difficulties cannot compete in the Bombay market with supplies from the Thana forests.

The "Frikiln" method of manufacturing charcoal was also demonstrated in the Belgaum division. Charcoal of superior quality is produced by this process, but the comparatively high initial cost of the kiln is a handicap for it to compete with the charcoal produced by the country type of kiln.

(4) The concession to the glass bangle industry was also continued and the Kajgar Co-operative Association of Ghodgeri in the Belgaum district was given a fresh coupe at a reduced rate of Rs. 4 per acre as against Rs. 5 charged last year.

(5) Shri Narsinha Saraswati Slate Works, Poona, have been granted the concession of removing certain softwoods up to 240 tons per year for 2 years for the manufacture of slate frames at Rs. 4 per ton.

(6) Out of 300 *khair* trees given to Mr. S. K. Kallapur of Honavar for the manufacture of catechu, 200 trees were worked by him. The quantity of catechu obtained from these trees was sold for Rs. 693 against an expenditure of Rs. 653. The working of the remaining 100 trees is being watched.

(7) With a view to ascertaining the possibilities of a sustained supply of wood for plywood manufacture from certain evergreen forests of the Kanara Eastern and Western divisions, sample plots are maintained at the suggestion of the Forest Botanist, Forest Research Institute, Dehra Dun. The Utilization Branch of the Institute has indicated, the uses of the species found in some of these plots and as matters stand at present there is no case for basing the plywood or other sister industry on these forests.

11. Logs of 37 species suggested by Mr. M. Vithalrao of Dharwar were sent to Dehra Dun for testing their suitability for plywood

manufacture. Results of some of these have been received. A proposal for establishing a plywood factory at Supa in the Kanara district made by Mr. Vithalrao was accepted by Government on certain conditions.

12. In addition to these industries the department has been carrying out investigations into the possibilities of starting new industries such as the manufacture of shuttles, picking arms, charcoal gas, etc.

13. The financial results of the year as compared with those of previous year show that the revenue dropped from Rs. 40·60 *lakhs* to 38·61 *lakhs* and the surplus from Rs. 13·73 *lakhs* to 12·30 *lakhs*. Similarly the expenditure also decreased by about Rs. 58,000. The decrease in revenue is chiefly due to the curtailed demand for sleepers and sawn material from the M. & S. M. Railway, reservation of some material of superior quality to meet a probable demand from the Defence Department, non-adjustment of the full revenue of the Alnavar-Dandeli Railway in the year's accounts of the department and lack of demand for coupes and low prices obtained for those sold as a result of the introduction of the minimum wage conditions in contractors' agreements.

14. The long felt need for a Silviculturist and a Utilization Officer was met by the creation of these two posts during the year. The former's duty is to carry out research in the several problems confronting Silviculture and regeneration with a view to increasing the potential value of the forests and placing their working on a more scientific and economic basis. The object of having a Utilization Officer is to stimulate the more extensive utilization of forest products some of which remain unexploited for want of markets or fetch inadequate prices at present, to develop forest industries and provide a liaison between commercial bodies and the Forest Department. Messrs. E. S. B. Tavener of the Indian Forest Service and J. V. Karamchandani of the Bombay Forest Service, Class I, were selected for these two posts. Both the officers after undergoing a course of practical training at the Forest Research Institute, Dehra Dun, took charge of their respective duties on 16th January 1940 and 1st November 1939. Mr. E. S. B. Tavener, immediately on return from Dehra Dun, devoted his attention to the organization of his office and formation of research centres and experimental gardens at Poona and Haliyal. Mr. Karamchandani visited a number of woodworking institutes and factories in Northern India before taking charge of his duties. Since joining his appointment, he has been engaged for the most part on behalf of the Supply Department of the Government of India on the inspection of timbers purchased by that department and in attending to enquiries regarding timber stocks etc., in connection with the war. He has, nevertheless, started a study of local conditions and is collecting statistics required for his work as Utilization Officer.

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15. The outstanding event of the year was the outbreak of war. This has not so far led to any very big demand for timber from this Province for war purposes but there were numerous enquiries for tent pins, bamboos, poles, sawn wood etc., and a great deal of work has been done in collecting information, quoting quantities, rates etc., as a preliminary to undertaking any possible supply in future. After the close of the year orders for the supply of 1,20,000 ballies (teak poles) and an educational order for 3,000 bamboos for tent poles were received. Further orders for ballies and bamboos are also expected. These supplies are being made departmentally from all the Circles. So far no reaction in the timber market is noticeable on account of the war, though there has been some tendency amongst certain contractors to gamble on a rise in prices.

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